

# **Wildland Fire Resource Advisor N-9042**

**February 11-13, 2020**

**Hosted by  
National Park Service  
and  
US Forest Service**



# DAY 1, 1300

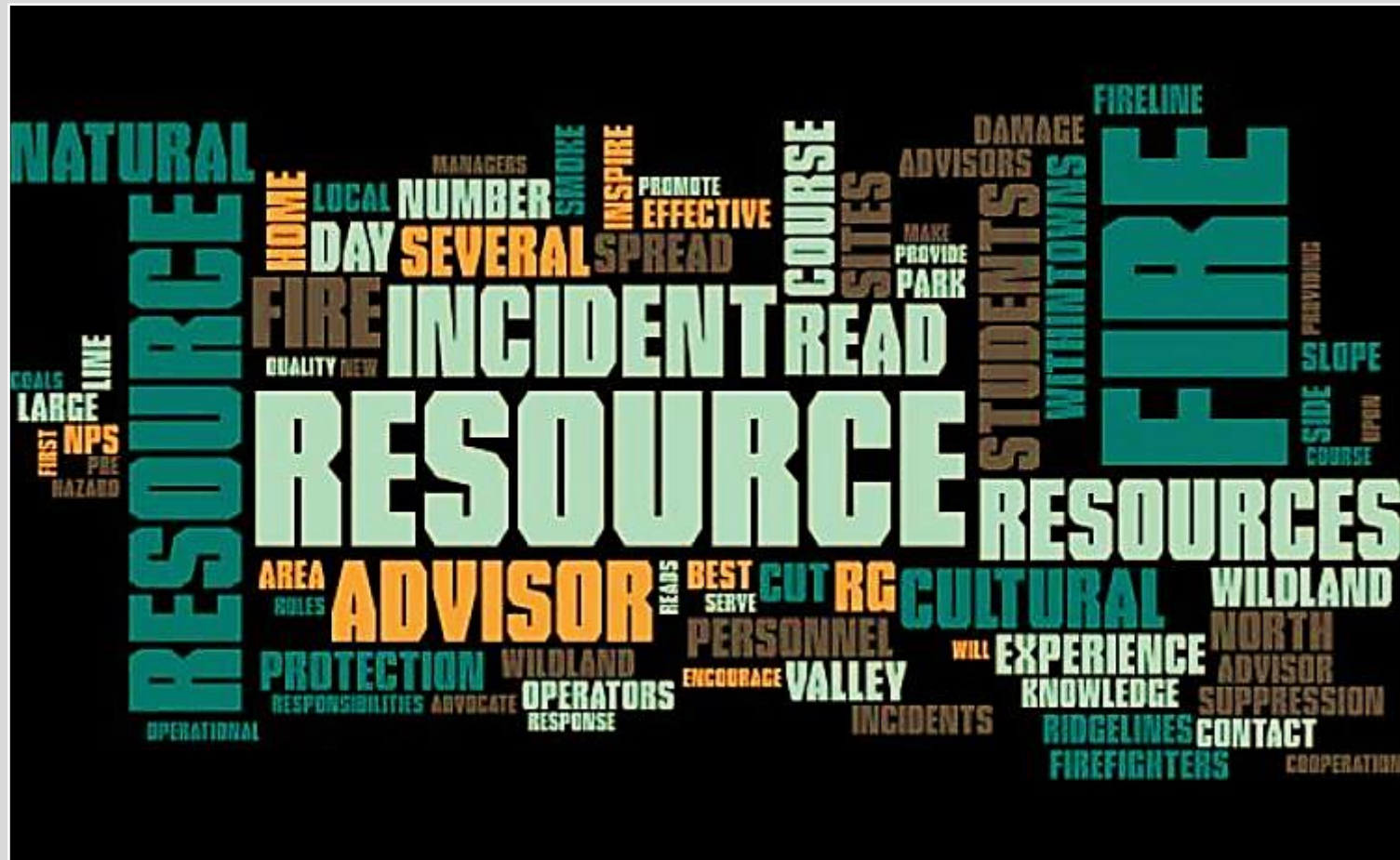


Day 1, 1300



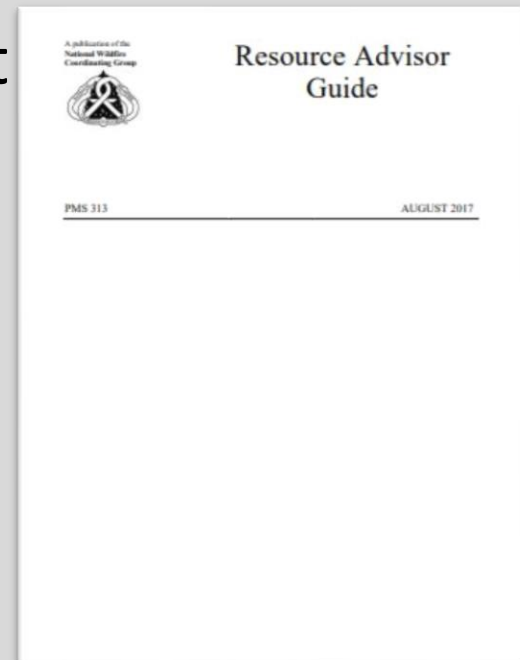


# Welcome!



# Role of the Resource Advisor\*

- Identifies and evaluates potential impacts and benefits of fire and fire management actions on natural, cultural and Wilderness resources
- Communicates resource issues to the Incident Commander (IC) and/or Incident Management Team (IMT)
- Identifies needs for:
  - Suppression damage repair
  - Post-fire stabilization and rehabilitation
  - Long-term restoration





# Who We Are...



Jun Kinoshita



Cedar Drake



Rich Schwab



Nelson Seifkin



Wylie Paxton



Missy  
Forder





**Your Photo Here....**



# CRITICAL CONCEPTS





# Safety First!

2001 Federal wildland fire policy: **“Firefighter and public safety is the first priority in every fire management activity”**



Wildland Firefighters  
Monument, National  
Interagency Fire  
Center, Boise, ID

# Advisor Means Advisor

- READs are **not decision makers** about on-the-ground strategies and tactics...



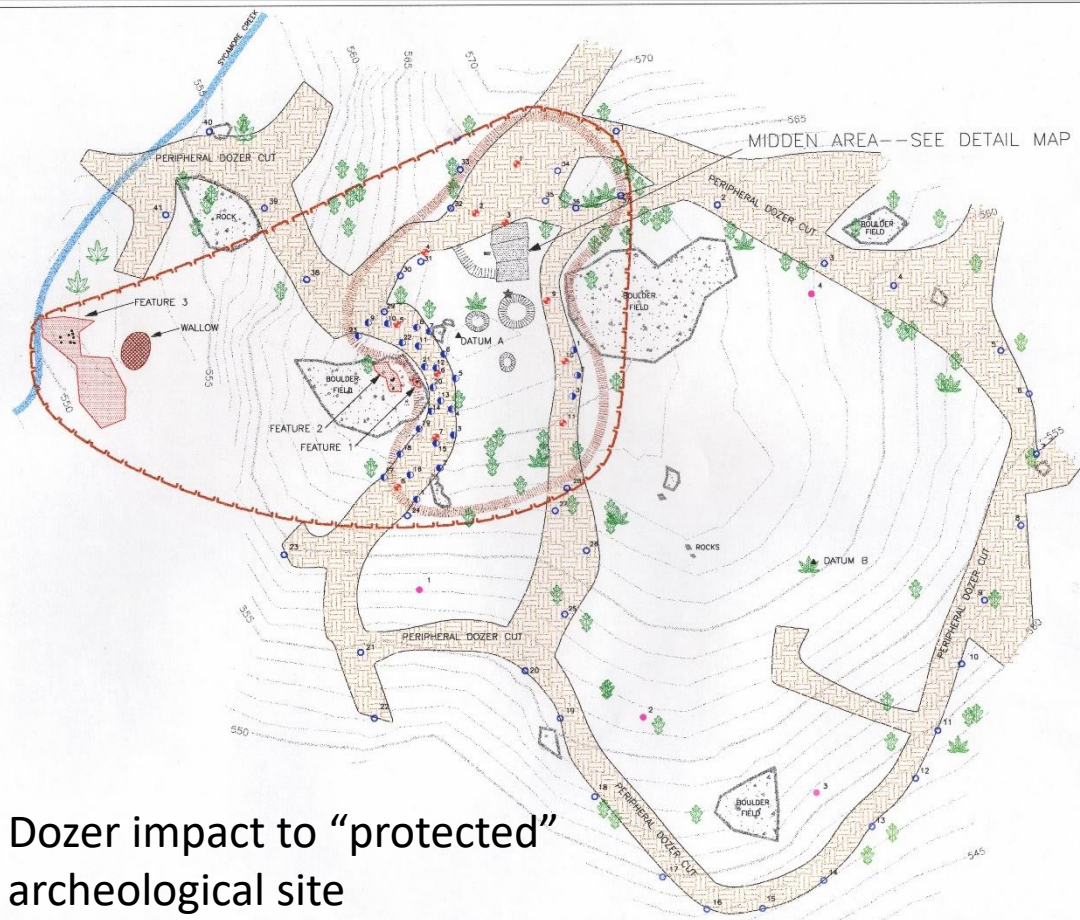
READ (left) advises  
a Division  
Supervisor about  
values at risk



# Minimize, Not Eliminate

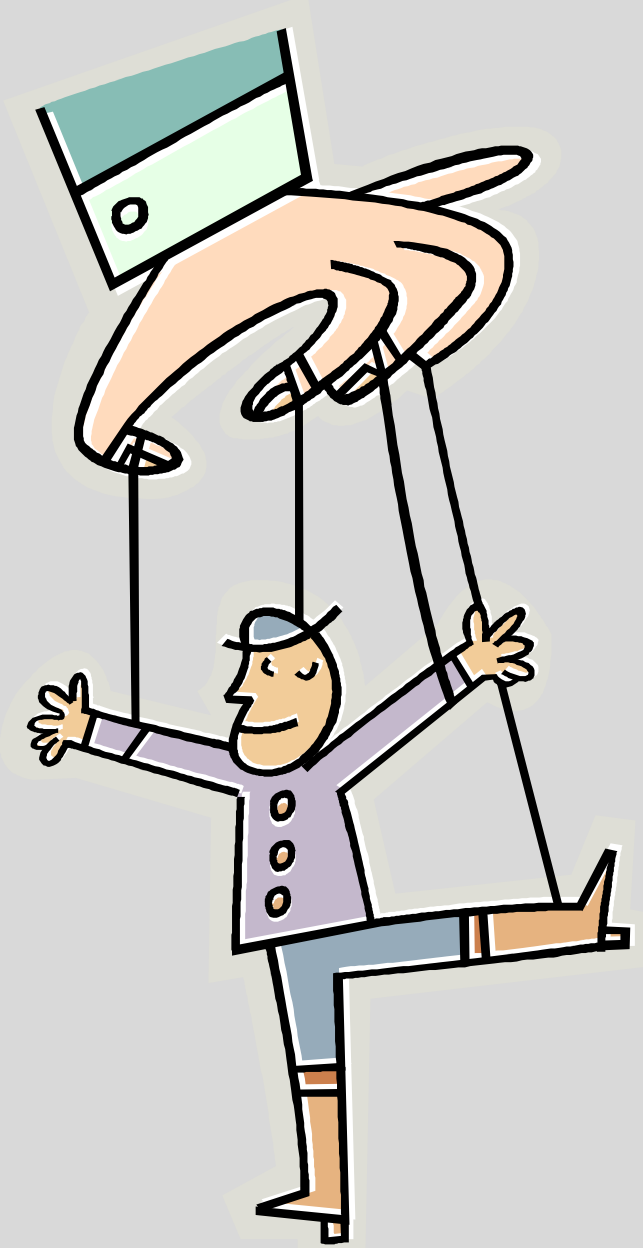
- READs input aimed at **minimizing impacts** to natural and cultural resources....%\*&! happens!

Weed cleaning station in weedy field



Dozer impact to “protected” archeological site

# "Social Engineering"

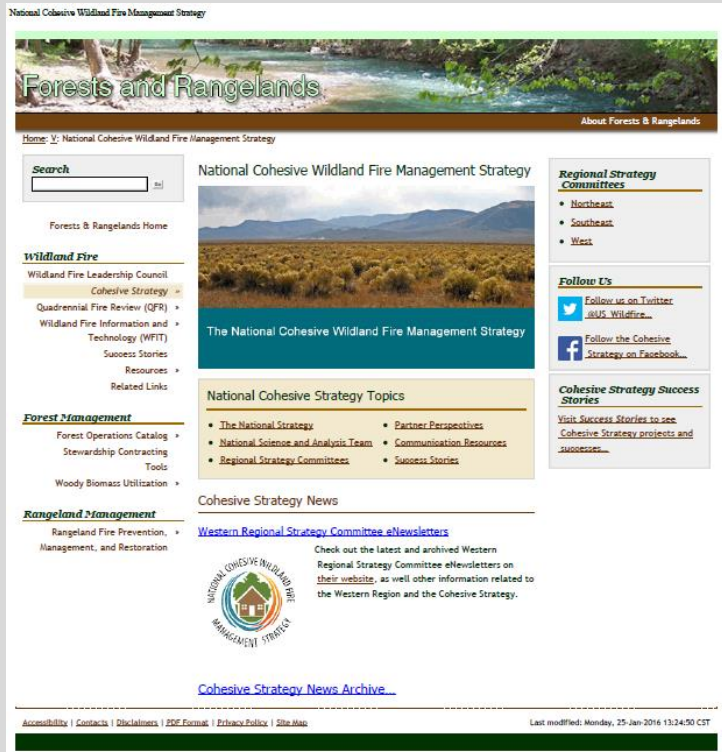








# Why READS?



## REVIEW AND UPDATE OF THE 1995 FEDERAL WILDLAND FIRE MANAGEMENT POLICY

JANUARY 2001

U.S. DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
National Park Service  
U.S. Fish and Wildlife Service  
Bureau of Indian Affairs  
Geological Survey  
Bureau of Reclamation

U.S. DEPARTMENT OF AGRICULTURE  
U.S. Forest Service

DEPARTMENT OF ENERGY  
DEPARTMENT OF DEFENSE

DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric  
Administration/National  
Weather Service

U.S. ENVIRONMENTAL  
PROTECTION AGENCY

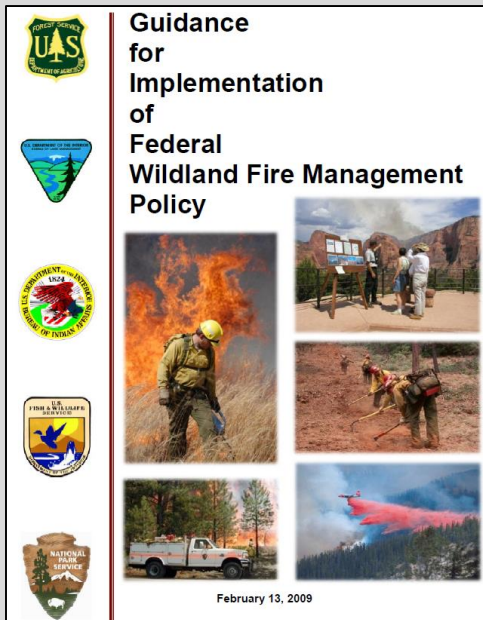
FEDERAL EMERGENCY  
MANAGEMENT AGENCY

NATIONAL ASSOCIATION OF STATE  
FORESTERS





# Federal Wildland Fire Management Policy

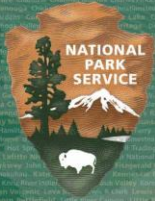


Word/Phrase	Occurrences
Ecological	8
Ecosystem	9
Land or Resource Management Plan	23
Natural and Cultural Resources	5
Resource Management Objectives	7

## 11. Suppression

Wildland fires are suppressed at minimum cost, considering firefighter and public safety, benefits, and values to be protected, consistent with resource objectives.

## Management Policies 2006



General  
Management  
Plan/Resource  
Stewardship Strategy

Specific  
Management  
Plans

Wildlife

Wilderness

Invasive Species

Cultural Resources

Vegetation

Fire  
Management  
Plan

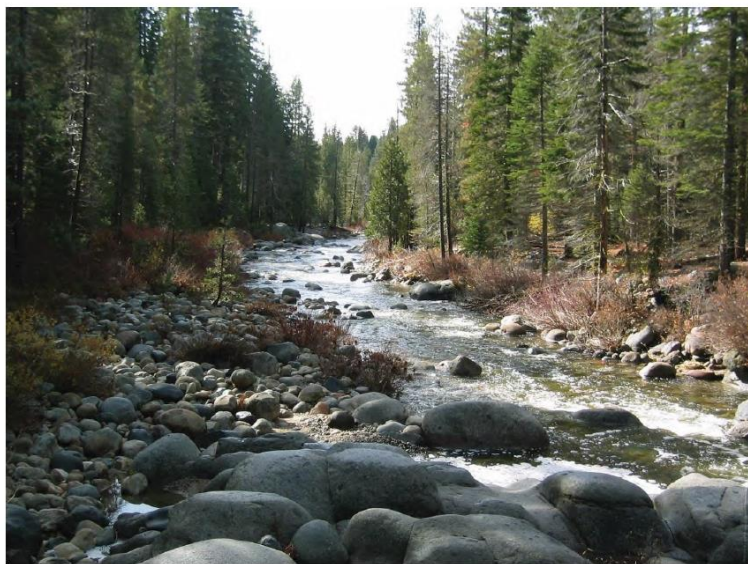




United States Department of Agriculture

# Draft Revised Land Management Plan for the Sierra National Forest

Fresno, Madera, and Mariposa Counties, California



Forest  
Service

Pacific Southwest  
Region

Sierra National  
Forest

R5-MB-295

May  
2016

## Yosemite National Park

National Park Service  
U.S. Department of the Interior



## Final Yosemite Fire Management Plan

*Environmental Impact Statement*

March 2004

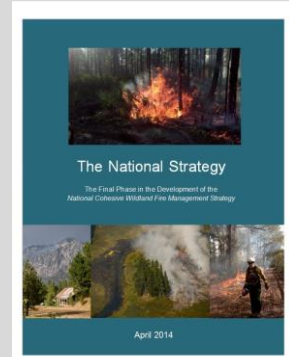


DeHof Fire, 2002  
Dan Horner, NPS

# National Cohesive Strategy

Cohesive Strategy vision for the next century:

*To safely and effectively extinguish fire, when needed;  
use fire where allowable;  
manage our natural resources;  
and as a Nation, live with wildland fire.*



## Cohesive Strategy goals:

- *Restore and maintain landscapes*
- *Fire-adapted communities*
- *Wildfire response*

### Restore and Maintain Landscapes:

**GOAL:** *Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.*

Outcome-based Performance Measure:

- Risk to landscapes is diminished.

National output-based metrics, in support of the national measure, will center on risk to ecosystems at landscape scales.



# Origins of Wildland Fire Resource Advising

## 1972 Moccasin Mesa Fire: Mesa Verde National Park



**Post-incident report:** Park had not anticipated the potential damage to archeological resources from firefighting activities. Damage from fire suppression can be selectively controlled and in many cases avoided.

# 1977 La Mesa Fire: Bandelier National Monument



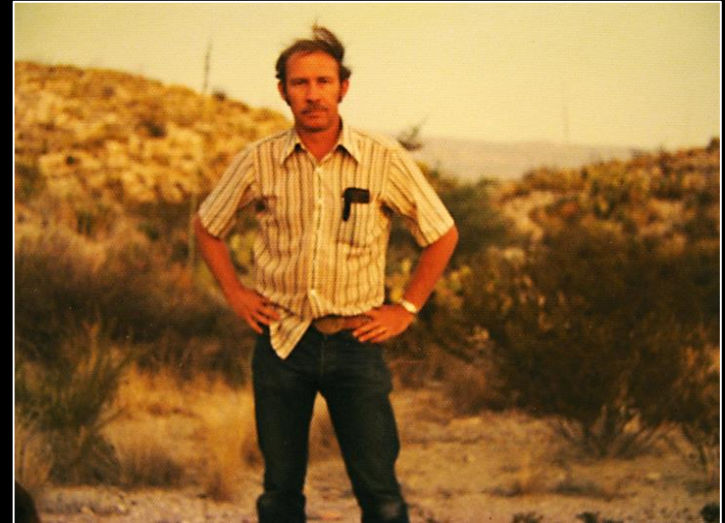
Los Alamos National Atomic Energy Laboratory



4,000 known cultural resource sites threatened



# 1977 La Mesa Fire: Bandelier National Monument



**Dr. Milford Fletcher**  
NPS Regional Biologist

“Dammit, that’s enough! We need a bunch of archeologists on the fireline with the crews and equipment or else we’ll lose a helluva lot more sites.”

Milford Fletcher (per John Lissoway: Bandelier NM Resource Manager in 1972)

# 1977 La Mesa Fire: Bandelier National Monument



For the first time archeologists worked with fire crews and heavy equipment operators to guide them away from archeological sites during fireline construction.



# La Mesa Study: An Investigation of Fire and Fire Suppression Impacts on Cultural Resources in Bandelier National Monument (NPS 1977)

Set forth recommendations for integrating archeologists into fire management in the future



## THE 1977 LA MESA FIRE STUDY:

AN INVESTIGATION OF FIRE AND FIRE SUPPRESSION IMPACT  
ON CULTURAL RESOURCES IN BANDELIER NATIONAL MONUMENT

Diane Traylor  
Lyndi Hubbell  
Nancy Wood  
Barbara Fiedler

Branch of Cultural Resources Management  
Division of Anthropology  
National Park Service  
Santa Fe, New Mexico

SOUTHWEST CULTURAL RESOURCES CENTER PROFESSIONAL PAPERS NUMBER 28

4. Under any circumstances in which cultural resources are threatened by fire (either wildfire or controlled burns), archeologists should be present to mitigate fire, fire suppression, or rehabilitation impact on those resources.

7. Each area or agency should see that interested archeologists have the opportunity to receive fire training and should form a well-trained core of archeologists from all available institutions and agencies to serve on a stand-by basis during the fire season. There are 27,000 lightning or man-caused fires annually in the western states, so the need is there (Sanderson 1976). In the event that qualified persons are unavailable for duty, archeologists from neighboring areas or trained park personnel should be present during all fire suppression and rehabilitation activities.

# NPS Wildland Fire Resource Advisor Training

- First offered in 2002, with BLM
- Taught more than 30 times
- Over 2,500 participants from federal, tribal, state, local, and private land management agencies



# Agenda, Course Organization & Objectives

- Scenario-based course structure...general information embedded within
- Relaxed, interactive presentation style & flexible schedule
- After this course you will:
  - have wildland fire READ or REAF qualifications
  - understand fire-related resource issues
  - understand incident management practices & the role of the READ or REAF
  - have the basis from which to develop or enhance the READ “kit” for your home unit
  - serve as a READ or REAF during the 2020 fire season

## White Slides: Grouse Fire scenario

## Gray Slides: “Teaching Moments” outside of scenario

### 18 Watchouts Situations

1. Fire not scouted and sized up.
2. In country not seen in daylight.
3. Safety zones and escape routes not identified.
4. Unfamiliar with weather and local factors influencing fire behavior.
5. Uninformed on strategy, tactics, and hazards.
6. Instructions and assignments not clear.
7. No communication link with crewmembers/supervisors.
8. Constructing line without safe anchor point.
9. Building fireline downhill with fire below.
10. Attempting frontal assault on fire.
11. Unburned fuel between you and the fire.
12. Cannot see main fire, not in contact with anyone who can.
13. On a hillside where rolling material can ignite fuel below.
14. Weather is getting hotter and drier.
15. Wind increases and/or changes direction.
16. Getting frequent spot fires across line.
17. Terrain and fuels make escape to safety zones difficult.
18. Taking a nap near the fire line.



18.TAKING A NAP NEAR THE FIRELINE

READ “Watchouts”



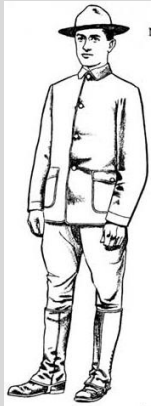
# Scenario Visitors

The well-prepared Resource Advisor



The Skeptical Fire Manager

The Politician (aka, Agency Administrator)



The Well-Meaning Resource Manager

# What is a Resource Advisor?

READs are designated as **Technical Specialists** by the National Wildfire Coordinating Group (NWCG) in the *Wildland Fire Qualification System Guide* (PMS 310-1)



A publication of the  
National Wildfire  
Coordinating Group

National Incident Management  
System:  
Wildland Fire Qualification  
System Guide

PMS 310-1

October 2017

Page 21....

There are five position categories recognized by NWCG:

2. Incident Command System (ICS)
3. Wildland Fire
4. Incident Support
5. Associated Activities
6. Technical Specialists



# What is a Resource Advisor?

PMS 310-1...page 22

## Technical Specialists

Technical Specialists are personnel with specialized skills gained through educational degree programs or industry training of established standards. These personnel may perform the same duties during an incident that they perform in their regular job and may have supplemental training in order to use their specialized skills in the incident environment.

Although position codes have been assigned to Technical Specialist positions that can be used within the ICS, no minimum qualifications have been established by NWCG. Standards for Technical Specialist qualifications are Agency determined. Contact your agency OTC representative for further information.

Federal agencies have consolidated minimum standards and information for frequently used positions not included in this guide. A link to the *Federal Wildland Fire Qualifications Supplement* is located at [https://www.nwcg.gov/sites/default/files/publications/federal-wildland-fire-qualifications-supplement\\_2017.pdf](https://www.nwcg.gov/sites/default/files/publications/federal-wildland-fire-qualifications-supplement_2017.pdf). For titles and position codes of identified Technical Specialists, see the IQCS website at <https://www.nifc.gov/IQCS/>.

# What is a Resource Advisor?

- Subject matter expertise

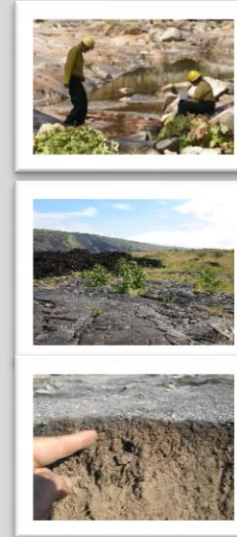
Cultural  
Resources



Natural  
Resources



Physical  
Resources



Wilderness



- Work environment: fireline, Incident Command Post (ICP)



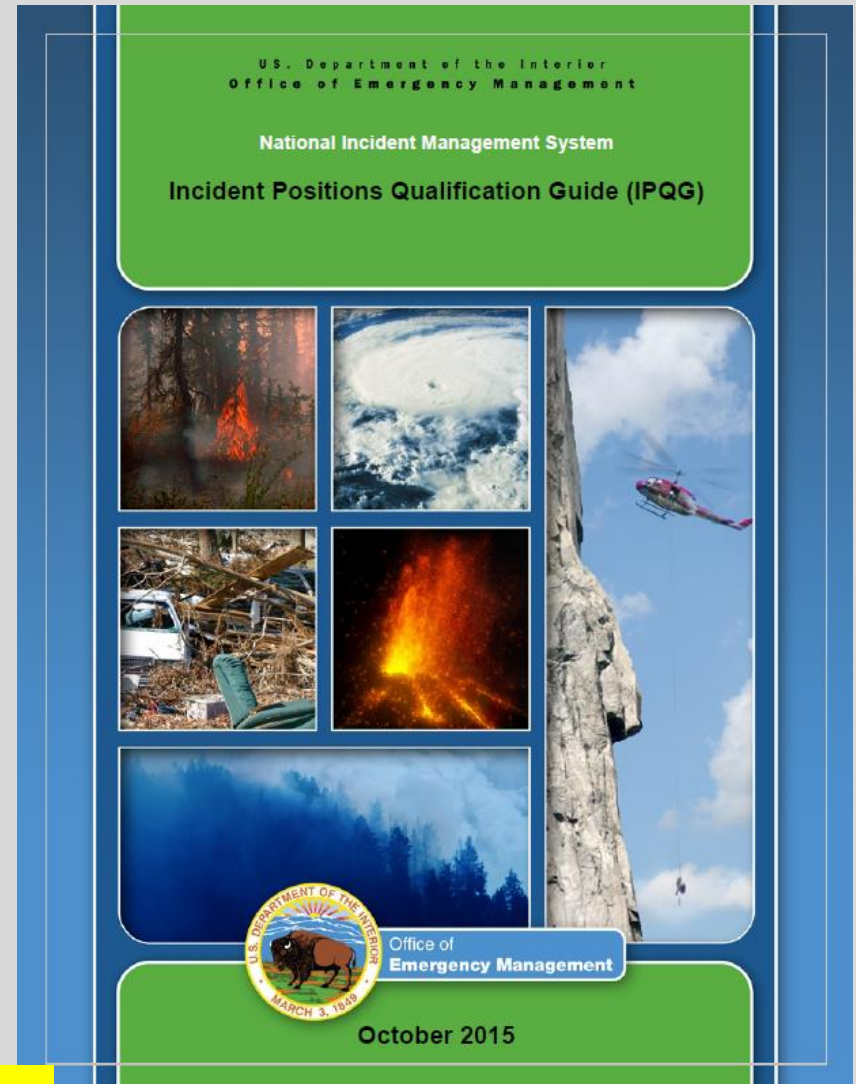


# Wildland Fire.....All Hazards



## FEDERAL WILDLAND FIRE QUALIFICATIONS SUPPLEMENT

January 2018



NOTE: Not an NWCG Document!



# All-Hazards Incidents



**2018 Hurricane Maria**



**2010 Deep Water Horizon Oil Spill**



**2010 Deep Water Horizon Oil Spill**



**2018 Lower Puna Eruption**

# All-Hazards (A-H) Incidents

Same general mechanism as wildland fire incidents:



- Obtain resource objectives from AA
- Source information from local resource specialists, management plans, guides
- Identify sensitive sites....communicate to Operations
- Develop resource protection measures (RPMs)...communicate to Operations
- Monitor, advise, problem-solve, document operational activities and impacts
- Develop, advise, problem-solve, and document repair treatments



# What is a Resource Advisor?

- IQCS: Incident Qualification and Certification System (<http://iqcsweb.nwcg.gov/>)



<b>INCIDENT QUALIFICATION CARD</b>					
<b>Printed</b> Jun/2/08	<b>Name</b> Siefkin,Nelson			<b>Employee Id</b> <div style="background-color: black; color: black;">[REDACTED]</div>	
<b>Refresher</b> May/23/09	<b>CA-WRP</b> Pacific West Regional Office			<b>Fitness</b>	<b>Moderate</b>
				<b>Expire</b>	<b>May/28/09</b>
<b>QUALIFIED POSITIONS</b>					
Status	Position	Description	Curr Exp		
Q	ARCH	Archaeologist	Sep/30/09		
Q	READ	Resource Advisor	Jul/20/10		
Q	BACS	BAER Cultural Resources Specia	Jun/2/13		
Q	BAEL	Burned Area Emergency Response	Jun/2/13		
<b>End Card Here</b>					
<b>Issuing Official</b> William Laage		<b>Title</b> Reg FMO CA-WRP		<b>Date</b> 6/13/08	

# What is a Resource Advisor?



## FEDERAL WILDLAND FIRE QUALIFICATIONS SUPPLEMENT

January 2019



Page 134

### RESOURCE ADVISOR (READ)

#### AGENCY ENDORSEMENTS:



Page 135

### RESOURCE ADVISOR, FIRELINE (REAF)

#### AGENCY ENDORSEMENTS:



**NEW!!!!**

Page 88

### ARCHAEOLOGIST (ARCH)

#### AGENCY ENDORSEMENTS:



Page 121

### CULTURAL SPECIALIST (CULS)

#### AGENCY ENDORSEMENTS:



## ARCHAEOLOGIST (ARCH)

### AGENCY ENDORSEMENTS:



### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)

### REQUIRED EXPERIENCE:

Must have performed as a specialist on a unit in this function

### PHYSICAL FITNESS LEVEL:

None

### THESE POSITIONS MAINTAIN CURRENCY FOR ARCH:

None

### ARCH MAINTAINS CURRENCY FOR THESE POSITIONS:

None

### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

AGENCY-SPECIFIC REQUIREMENTS
No additional requirements.

\*If visits to the fireline/prescribed burn are required to perform assigned duties, all ARCHs must meet the requirements for non-escorted visits or be escorted by a qualified individual per the requirements contained in the [Interagency Standards for Fire and Fire Aviation Operations Guide](https://www.nifc.gov/policies/pol_ref_redbook.html) ([https://www.nifc.gov/policies/pol\\_ref\\_redbook.html](https://www.nifc.gov/policies/pol_ref_redbook.html)), Chapter 7.

Note that if you have been an archeologist for your job, you can be one on a fire. Does this mean you must meet the Secretary's standard?

Also, note the stipulation about visits to the fireline.



## RESOURCE ADVISOR (READ)

### AGENCY ENDORSEMENTS:



### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Resource Advisor (N-9042)

### REQUIRED EXPERIENCE:

None

### PHYSICAL FITNESS LEVEL:

None

### THESE POSITIONS MAINTAIN CURRENCY FOR READ:

Resource Advisor, Fireline (REAF)

### READ MAINTAINS CURRENCY FOR THESE POSITIONS:

Resource Advisor, Fireline (REAF)

### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

AGENCY-SPECIFIC REQUIREMENTS	
BLM	DOI Learn course can satisfy the N-9042 course requirement
BIA	

## RESOURCE ADVISOR, FIRELINE (REAF)

### AGENCY ENDORSEMENTS:



### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Basic ICS: ICS for Single Resources and Initial Action Incidents (ICS-200)  
Firefighter Training (S-130)  
Introduction to Wildland Fire Behavior (S-190)  
Human Factors in the Wildland Fire Service (L-180)  
Annual Fireline Safety Refresher (RT-130)  
Resource Advisor (N-9042)

### REQUIRED EXPERIENCE:

None

### PHYSICAL FITNESS LEVEL:

Moderate

### THESE POSITIONS MAINTAIN CURRENCY FOR REAF:

Resource Advisor (READ)

### REAF MAINTAINS CURRENCY FOR THESE POSITIONS:

Resource Advisor (READ)

### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

AGENCY-SPECIFIC REQUIREMENTS	

# What is a Resource Advisor?

*Interagency  
Standards for Fire  
and Fire Aviation  
Operations (Red  
Book), pg. 273*

## Universal Training Requirements

All personnel filling **NWCG recognized positions** on the fireline must have completed:

- S-130 Firefighter Training (including the required field exercises);
- S-190 Introduction to Wildland Fire Behavior;
- L-180 Human Factors on the Fireline;
- ICS-100 Introduction to ICS; and
- IS-700A NIMS: An Introduction (or current version).

**NOT US**

“Visitors” to the fireline [Red Book, Chapter 7]...

### Non-Escorted Visits

Visitors must have an incident qualification with a minimum physical fitness level of “light” to visit the fireline unescorted.

- Must have adequate communications and radio training.
- Completed the following training:
  - Introduction to Fire Behavior (S-190).
  - Firefighter Training (S-130).
  - Annual Fireline Safety Refresher Training, including fire shelter training.
- Deviation from these requirements must be approved by the IC or Burn Boss.

### Escorted Visits

All visitors lacking the above training and physical requirements must be escorted while on the fireline.

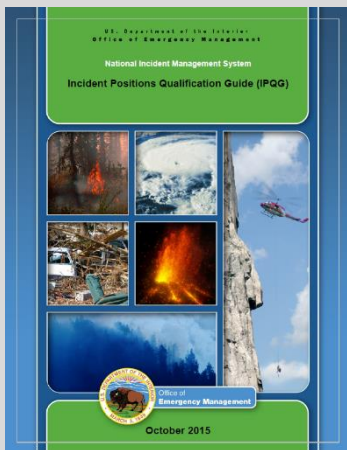
- Visitors must receive training in the proper use of Fireline PPE.
- Requirement for hand tool and water to be determined by escort.
- Visitors must be able to walk in mountainous terrain and be in good physical condition with no known limiting conditions.
- **Escorts must be minimally qualified as Single Resource Boss.**
- Deviation from these requirements must be approved by the IC or Burn Boss.

# What is a Resource Advisor?

## The Wildcards...DOI All-Hazard, USFS THSP

- DOI All-Hazard

- Lots of resource-specific position codes recognized...Anthropologist (ANTH), Historical Landscape Architect (LAAR), Biologist (BIOL), Botanist (BOTA), Geologist (GEOL), etc.
- Theoretically available for use on wildland fires



Individuals who are qualified for many of the positions in the IPQG may also be qualified to respond to a wildland fire in the position(s) they are qualified. Wildland fire qualification requirements are found in the Wildland Fire Qualification System Guide (PMS 310-1<sup>8</sup>). All personnel filling NWCG recognized positions on the fireline must meet the Universal Training Requirements found in the Interagency Standards for Fire and Fire Aviation Operations<sup>9</sup>.

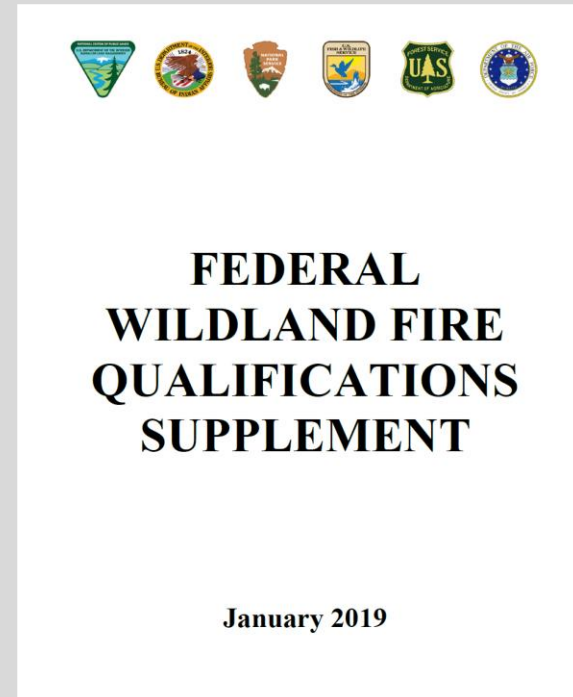
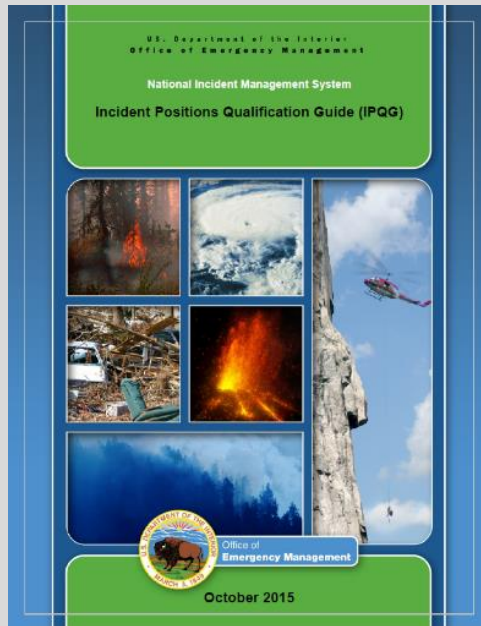
**ENDORSEMENTS BY INCIDENT KIND OR DISCIPLINE**  
Oil or Hazardous Materials Releases (see Annex F)  
Wildland Fire (see Annex F)



# What is a Resource Advisor?

The Wildcards...DOI All-Hazard, USFS THSP

- DOI All-Hazard



**REAC**-Resource Advisor Coordinator

=

**READ**-Resource Advisor

**READ**-Resource Advisor

=

**REAF**-Resource Advisor, Fireline

# What is a Resource Advisor?

## The Wildcards...DOI All-Hazard, USFS THSP

- USFS THSP

- Technical Specialist (THSP) position liberally utilized by the USFS...not supported by guides

Incident Qualifications and Certification System (IQCS)					
Active IQCS Positions					
				Total Active Positions:	419
				List Updated:	Jan-19-2017
Qualification		Source Document			
Position Code	Position Description	310-1 Wildland Fire Qualification System Guide	Forest Service Fire and Aviation Qualifications Guide (FSFAQG)	Federal Wildland Fire Qualifications Supplement	DOI Incident Position Qualification Guide (IPQG) <small>* NWCG 310-1 Positions Recognized by DOI</small>
THSP	Technical Specialist				



READ-Resource Advisor

REAF-Resource Advisor, Fireline

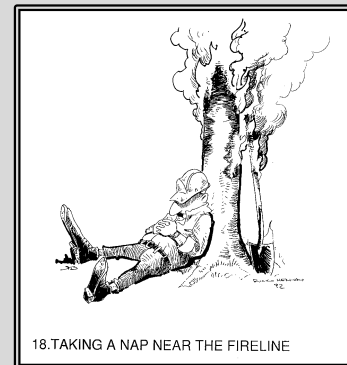
ARCH-Archeologist

CULS-Cultural Specialist

THSP-Technical Specialist

# READs & REAFs

- READs interact directly with the IMT at the ICP
- REAFs interact directly with firefighting personnel on the fireline

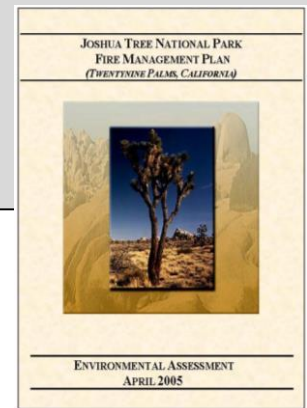
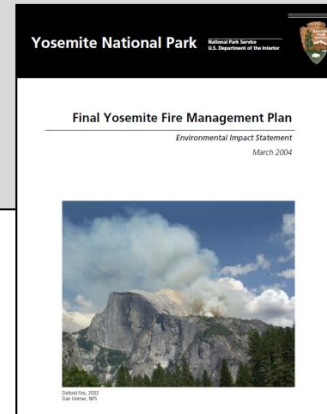






# Agency Administrator/Line Officer

- Park Superintendent, Forest Supervisor, Refuge Manager, Field Manager, etc.
- Establishes through park management documents:
  - appropriate utilization of READs and AREP
  - issues to be considered
  - proper protocols before, during and after incidents



## FIRE MANAGEMENT PLAN

Shenandoah National Park

March 2006



# Resource Advisor

vs.

## Agency Representative (AREP)

- The AREP represents the political, social, environmental and economic issues of the Agency Administrator to the IC or IMT
- Often the AREP is a Fire Management Officer (FMO), District Ranger, Chief Ranger, etc.
- On small or simple incidents, READ and AREP positions may be combined

# Cultural Specialist (CULS)

- Often representative of local tribes
- Identification, documentation, & repair of impacted cultural sites
  - e.g. Chumash Engine/CULS crew
- Works with READs for the AREP





# How do I become a Resource Advisor?



INCIDENT QUALIFICATION CARD			
Printed <b>06/08/18</b>	Name <b>Kinoshita, Jun</b>		Employee ID <b>00001018400</b>
RT-130 Exp <b>06/30/19</b>	MT-R01 Northern Regional Office (R-1)		Fitness <b>Arduous</b> Expires <b>06/29/19</b>
QUALIFIED POSITIONS			
Status	Position	Description	Curr Exp
Q	ARCH	Archaeologist	11/08/22
Q	READ	Resource Advisor	08/18/22
Q	REAF	Resource Advisor, Fireline	08/18/22
Q	HECM	Helicopter Crewmember	07/08/20
Q	FFT1	Firefighter Type 1	11/03/22
<b>Fold Card Here</b>			
Q	ICT5	Incident Commander Type 5	11/03/22
Q	RXB3	Prescribed Fire Burn Boss T3	05/02/23
Q	SMKJ	Smokejumper	06/08/21
T	CRWB	Crew Boss, Single Resource	10/06/18
T	FAL1	Advanced Faller	03/03/19
Certifying Official <i>[Signature]</i>		Title <i>Rep Director R1-FAA</i>	Date <i>6/8/18</i>

# How do I become a Resource Advisor?

1. Take this course (or an equivalent) and other required training(s)
2. Possess or develop the appropriate skills and knowledge
3. Achieve the proper physical fitness level through the Work Capacity Test (WCT)
4. Have your Fire Management Officer (FMO) or equivalent include READ or REAF & related qualifications on your Incident Qualifications Card (“Red Card”)

# How do I become a Resource Advisor? Training

## RESOURCE ADVISOR (READ)

### AGENCY ENDORSEMENTS:



### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Resource Advisor (N-9042)

### REQUIRED EXPERIENCE:

None

### PHYSICAL FITNESS LEVEL:

None

### THESE POSITIONS MAINTAIN CURRENCY FOR READ:

None

### READ MAINTAINS CURRENCY FOR THESE POSITIONS:

None

### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

### AGENCY-SPECIFIC REQUIREMENTS

BLM BIA	DOI Learn course can satisfy the N-9042 course requirement
------------	------------------------------------------------------------

## RESOURCE ADVISOR, FIRELINE (REAF)

### AGENCY ENDORSEMENTS:



### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Basic ICS: ICS for Single Resources and Initial Action Incidents (ICS-200)  
Firefighter Training (S-130)  
Introduction to Wildland Fire Behavior (S-190)  
Human Factors in the Wildland Fire Service (L-180)  
Annual Fireline Safety Refresher (RT-130)  
Resource Advisor (N-9042)

### REQUIRED EXPERIENCE:

None

### PHYSICAL FITNESS LEVEL:

Moderate

### THESE POSITIONS MAINTAIN CURRENCY FOR REAF:

None

### REAF MAINTAINS CURRENCY FOR THESE POSITIONS:

None

### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

### AGENCY-SPECIFIC REQUIREMENTS

BLM BIA	DOI Learn course can satisfy the N-9042 course requirement
------------	------------------------------------------------------------

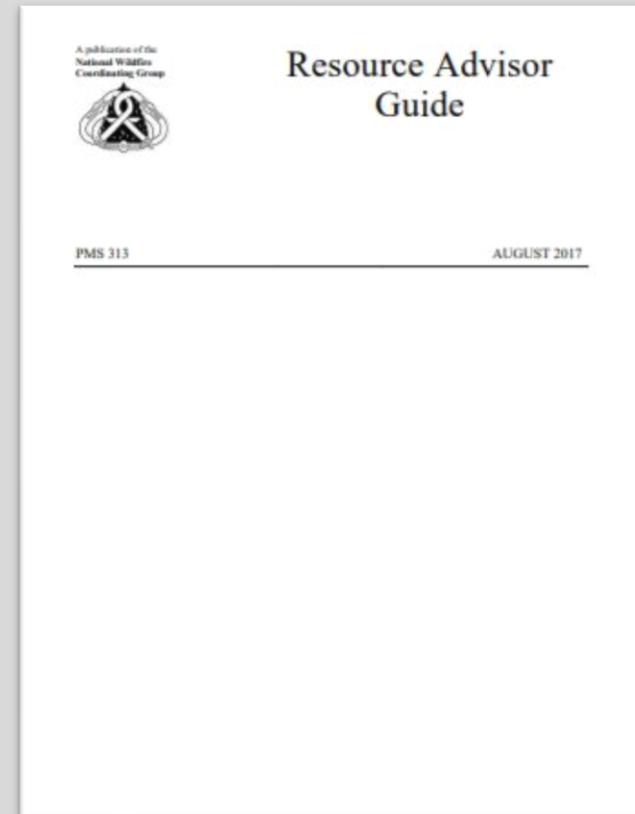


# How do I become a Resource Advisor?

## Knowledge and Skills

### General Roles and Responsibilities

- Ensure safety
- Be prepared
- Gather information
- Communicate
- Document
- Positive feedback



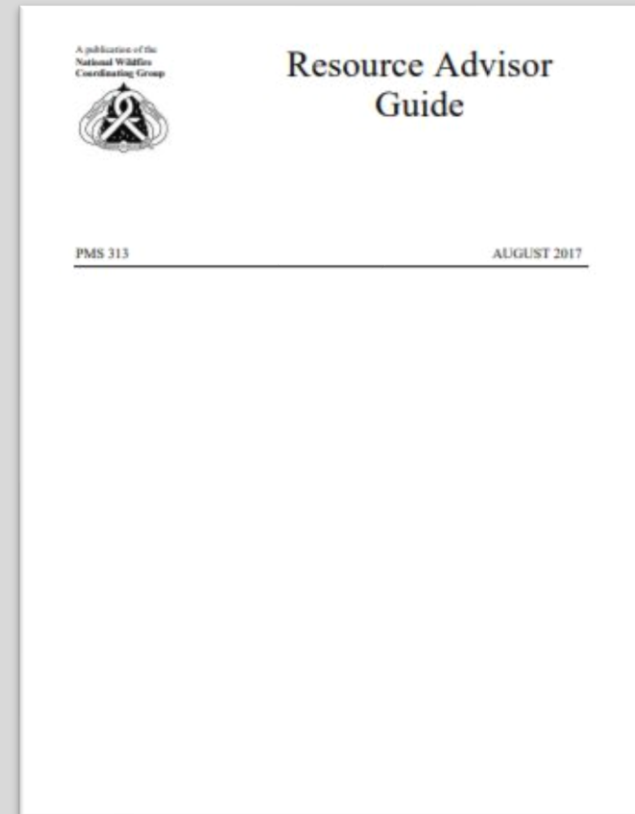
Pages 10-15

# How do I become a Resource Advisor?

## Knowledge and Skills

### READ

- Leadership and/or supervision to coordinate a team of Resource Advisors
- Primary point of contact to the Incident Management Team (IMT)
- Knowledge of resource management to identify the appropriate subject matter expertise to address specific needs.



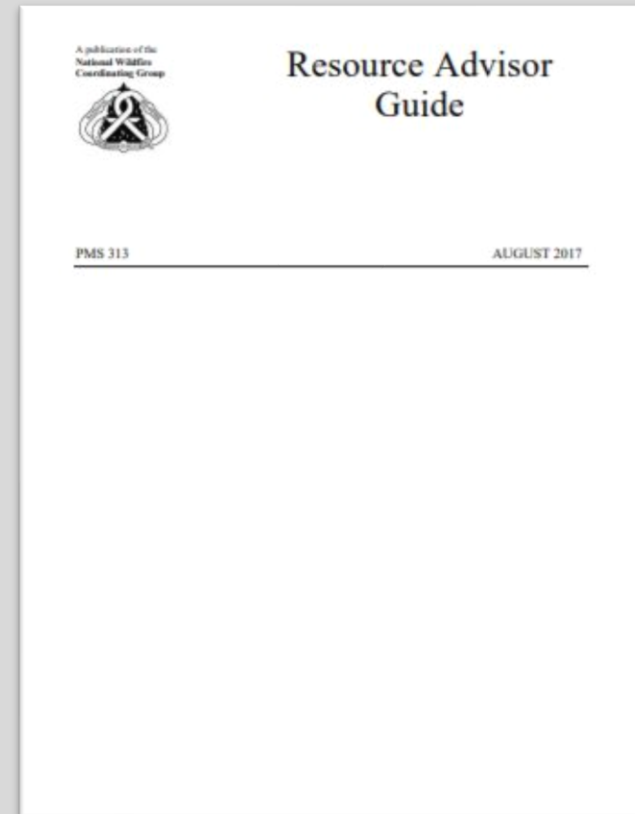
Pages 15-16

# How do I become a Resource Advisor?

## Knowledge and Skills

### REAF

- Understand basic wildland fire management principles
- Apply “day job” and general resource management knowledge on fireline...threats, mitigations, repairs
- Effectively communicate in dynamic/fluid situations
- Exhibit adequate fitness for the conditions at hand



Pages 19-22



# How do I become a Resource Advisor?

## Fitness

### RESOURCE ADVISOR (READ)

#### AGENCY ENDORSEMENTS:



#### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Resource Advisor (N-9042)

#### REQUIRED EXPERIENCE:

None

#### PHYSICAL FITNESS LEVEL:

None

#### THESE POSITIONS MAINTAIN CURRENCY FOR READ:

None

#### READ MAINTAINS CURRENCY FOR THESE POSITIONS:

None

#### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

#### AGENCY-SPECIFIC REQUIREMENTS

BLM BIA	DOI Learn course can satisfy the N-9042 course requirement
------------	------------------------------------------------------------

### RESOURCE ADVISOR, FIRELINE (REAF)

#### AGENCY ENDORSEMENTS:



#### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Basic ICS: ICS for Single Resources and Initial Action Incidents (ICS-200)  
Firefighter Training (S-130)  
Introduction to Wildland Fire Behavior (S-190)  
Human Factors in the Wildland Fire Service (L-180)  
Annual Fireline Safety Refresher (RT-130)  
Resource Advisor (N-9042)

#### REQUIRED EXPERIENCE:

None

#### PHYSICAL FITNESS LEVEL:

Moderate

#### THESE POSITIONS MAINTAIN CURRENCY FOR REAF:

None

#### REAF MAINTAINS CURRENCY FOR THESE POSITIONS:

None

#### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

#### AGENCY-SPECIFIC REQUIREMENTS

BLM BIA	DOI Learn course can satisfy the N-9042 course requirement
------------	------------------------------------------------------------

# How do I become a READ?

## Fitness

310-1

**Arduous** - Duties involve field work requiring physical performance with above average endurance and superior conditioning. These duties may include an occasional demand for extraordinarily strenuous activities in emergencies under adverse environmental conditions and over extended periods of time. Requirements include running, walking, climbing, jumping, twisting, bending, and lifting more than 50 pounds; the pace of the work typically is set by the emergency conditions.

**None.** Duties are normally performed in a controlled environment, such as an incident command post, base or camp. For any position identified in the IPQG with a fitness level of "None" or any technical specialist positions who have the need to be on the incident, the required fitness level shall be "Light."

required for moderately strenuous activities in emergencies over long periods of time. Individuals usually set their own work pace.

**Light** - Duties mainly involve office type work with occasional field activity characterized by light physical exertion requiring basic good health. Activities may include climbing stairs, standing, operating a vehicle, and long hours of work, as well as some bending, stooping, or light lifting. Individuals can usually govern the extent and pace of their physical activity.

# How do I become a READ?

## Fitness

<b><u>Work Category</u></b>	<b><u>Test</u></b>	<b><u>Distance</u></b>	<b><u>Weight</u></b>	<b><u>Time</u></b>
Arduous	Pack	3 miles	45 lbs.	45 min.
Moderate	Field	2 miles	25 lbs.	30 min.
Light	Walk	1 mile	None	16 min.







# How do I become a Resource Advisor?

## FMO Designation

All Technical Specialists positions are **FMO designations**...no formal task books.

INCIDENT QUALIFICATION CARD			
Printed 06/08/18	Name Kinoshita, Jun	Employee ID 00001018400	
RT-130 Exp 06/30/19	MT-R01 Northern Regional Office (R-1)	Fitness Arduous Expires 06/29/19	
QUALIFIED POSITIONS			
Status	Position	Description	Curr Exp
Q	ARCH	Archaeologist	11/08/22
Q	READ	Resource Advisor	08/18/22
Q	REAF	Resource Advisor, Fireline	08/18/22
Q	HECM	Helicopter Crewmember	07/08/20
Q	FFT1	Firefighter Type 1	11/03/22
Fold Card Here			
Q	ICT5	Incident Commander Type 5	11/03/22
Q	RXB3	Prescribed Fire Burn Boss T3	05/02/23
Q	SMKJ	Smokejumper	06/08/21
T	CRWB	Crew Boss, Single Resource	10/06/18
T	FAL1	Advanced Faller	03/03/19
Certifying Official 	Title Rep Director R1-FMO	Date 6/8/18	

<small>A Publication of the National Wildfire Coordinating Group</small>  <small>Sponsored by United States Department of Agriculture  United States Department of the Interior  National Association of State Foresters</small>		<b>NATIONAL INTERAGENCY INCIDENT MANAGEMENT SYSTEM</b>  <b>TASK BOOK FOR THE POSITION OF</b>  <b>DIVISION/GROUP SUPERVISOR (DIVS)</b>  <b>(POSITION PERFORMANCE ON A WILDLAND OR PRESCRIBED FIRE ASSIGNMENT REQUIRED)</b>
	<b>PMS 311-09</b> <b>NFES 2310</b>	<b>June 2004</b>
<b>TASK BOOK ASSIGNED TO:</b>		
INDIVIDUAL'S NAME, DUTY STATION, AND PHONE NUMBER		
<b>TASK BOOK INITIATED BY:</b>		
OFFICIAL'S NAME, TITLE, DUTY STATION, AND PHONE NUMBER		
LOCATION AND DATE THAT TASK BOOK WAS INITIATED		
<p><i>The material contained in this book accurately defines the performance expected of the position for which it was developed. This task book is approved for use as a position qualification document in accordance with the instructions contained herein.</i></p>		

# How do I become a Resource Advisor?

## FMO Designation

### RESOURCE ADVISOR (READ)

#### AGENCY ENDORSEMENTS:



#### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Resource Advisor (N-9042)

#### REQUIRED EXPERIENCE:

None

#### PHYSICAL FITNESS LEVEL:

None

#### THESE POSITIONS MAINTAIN CURRENCY FOR READ:

None

#### READ MAINTAINS CURRENCY FOR THESE POSITIONS:

None

#### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

#### AGENCY-SPECIFIC REQUIREMENTS

BLM BIA	DOI Learn course can satisfy the N-9042 course requirement
------------	------------------------------------------------------------

### RESOURCE ADVISOR, FIRELINE (REAF)

#### AGENCY ENDORSEMENTS:



#### REQUIRED TRAINING:

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Basic ICS: ICS for Single Resources and Initial Action Incidents (ICS-200)  
Firefighter Training (S-130)  
Introduction to Wildland Fire Behavior (S-190)  
Human Factors in the Wildland Fire Service (L-180)  
Annual Fireline Safety Refresher (RT-130)  
Resource Advisor (N-9042)

#### REQUIRED EXPERIENCE:

None

#### PHYSICAL FITNESS LEVEL:

Moderate

#### THESE POSITIONS MAINTAIN CURRENCY FOR REAF:

None

#### REAF MAINTAINS CURRENCY FOR THESE POSITIONS:

None

#### ADDITIONAL TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS:

None

#### AGENCY-SPECIFIC REQUIREMENTS

BLM BIA	DOI Learn course can satisfy the N-9042 course requirement
------------	------------------------------------------------------------

<b>QUALIFICATION REQUIREMENTS</b>	<b>READ</b>	<b>REAF</b>	<b>ARCH</b>
Physical Fitness Minimum Standard	NONE	MODERATE	NONE
Red Card required (S-130, S-190, L-180)	NO but recommended	YES	NO but recommended
Annual fire refresher (RT-130) required?	NO but recommended	YES	NO but recommended
Resource Advisor Course (N-9042) required?	YES	YES	NO
ICS-100 required?	YES	YES	YES
IS-700 required?	YES	YES	YES
ICS-200 required?	NO	YES	NO
"THSP" on Red Card required?	NO but recommended	NO but recommended	NO but recommended
Additional required experience?	NONE	NONE	Must have performed as a specialist on a unit in this function.

Non-escorted visitors to the fireline must at a minimum:

- be red-carded
- have completed an annual fire refresher
- possess a minimal physical fitness standard of "light"
- have adequate communications and radio training

Escorted visitors to the fireline must at a minimum:

- be equipped and trained in the use of fireline PPE
- be equipped with a hand tool, water, and be able to walk in mountainous terrain with no limiting conditions
- be accompanied by firefighter minimally qualified as a single resource boss

Any deviation from these requirements must be approved by the incident commander or burn boss.

The incident commander or burn boss may choose to increase the stringency of these requirements.



# How do I become a Resource Advisor?

## Am I a READ? REAF? Both? Neither?

“Fred”



*Principle Work Area:*  
Fireline



**REAF**

“Roscoe”



*Principle Work Area:*  
ICP



**READ**

“Otis”



*Principle Work Area:*  
Fireline & ICP



**REAF & READ**

# How do I become a Resource Advisor?

## Concluding Thoughts...

- Think very carefully before adding **READ** to your Red Card
- Take “Trainee” assignments and/or work with experienced READs/REAFs



# READ Trainee Positions

**2011 Dollar Lake Fire: Mt. Hood National Forest**





# Building the Perfect REAF...

## The skeptical Fire Manager...

- Personally liable for your safety
- Lots of things to think and worry about
- Doesn't like "loose ends"



# Building the Perfect REAF...

Red Book,  
Pg. 273

## **Non-Escorted Visits**

Visitors must have an incident qualification with a **minimum physical fitness level of "light" to visit the fireline unescorted.**

- Must have adequate communications and radio training.
- Completed the following training:
  - **Introduction to Fire Behavior (S-190).**
  - **Firefighter Training (S-130).**
  - **Annual Fireline Safety Refresher Training,** including fire shelter training.
- Deviation from these requirements must be approved by the IC or Burn Boss.

## **RESOURCE ADVISOR, FIRELINE (REAF)**

### **REQUIRED TRAINING:**

National Incident Management System, An Introduction (IS-700)  
Introduction to ICS (ICS-100)  
Basic ICS: ICS for Single Resources and Initial Action Incidents (ICS-200)  
Firefighter Training (S-130)  
Introduction to Wildland Fire Behavior (S-190)  
Human Factors in the Wildland Fire Service (L-180)  
Annual Fireline Safety Refresher (RT-130)  
Resource Advisor (N-9042)

**PHYSICAL FITNESS LEVEL:**  
Moderate

310-1 Supplement, pg. 121

# Building the Perfect REAF...

On a typical fireline...

## Arduous:

Incident Commander, Types 3-5  
Division Supervisor  
Task Force & Strike Team Leaders  
Crew Boss  
Firefighters, Types 1-2  
Helicopter Crewmember  
EMT, Fireline

## Moderate:

Line Safety Officer  
Field Observer  
Fire Behavior Analyst  
Fire Effects Monitor  
REAF





# Building the perfect REAF...

The path (of least resistance) to respectability...  
Firefighter Type 2 (FFT2)

## **Firefighter Type 2 (FFT2)** (Position Category: Wildland Fire)

### **REQUIRED TRAINING**

Basic Firefighter Training:

Introduction to ICS (ICS-100)

Human Factors in the Wildland Fire Service (L-180)

Firefighter Training (S-130)

Introduction to Wildland Fire Behavior (S-190)

NIMS: An Introduction (IS-700)

Annual Fireline Safety Refresher (RT-130)\*

### **REQUIRED EXPERIENCE**

None

### **PHYSICAL FITNESS LEVEL**

[Arduous](#)

A publication of the  
National Wildfire  
Coordinating Group



**National Incident Management System:  
Wildland Fire Qualification System Guide**

PMS 310-1

October 2016

pg. 73

*Note: For the Firefighter Type 2 (FFT2) position, satisfactory completion of the required training meets the position qualification requirements.*

# Building the Perfect REAF...

Build your skills, qualifications and rep...





# Building the Perfect READ...

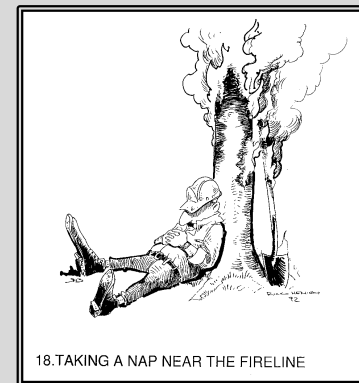
ICs and DIVS...the gatekeepers





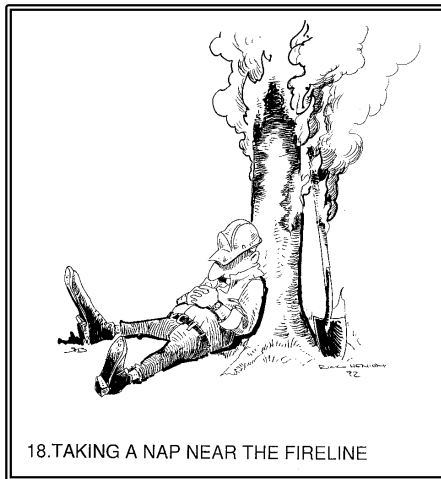
# Building the Perfect READ

READs and personal responsibility...



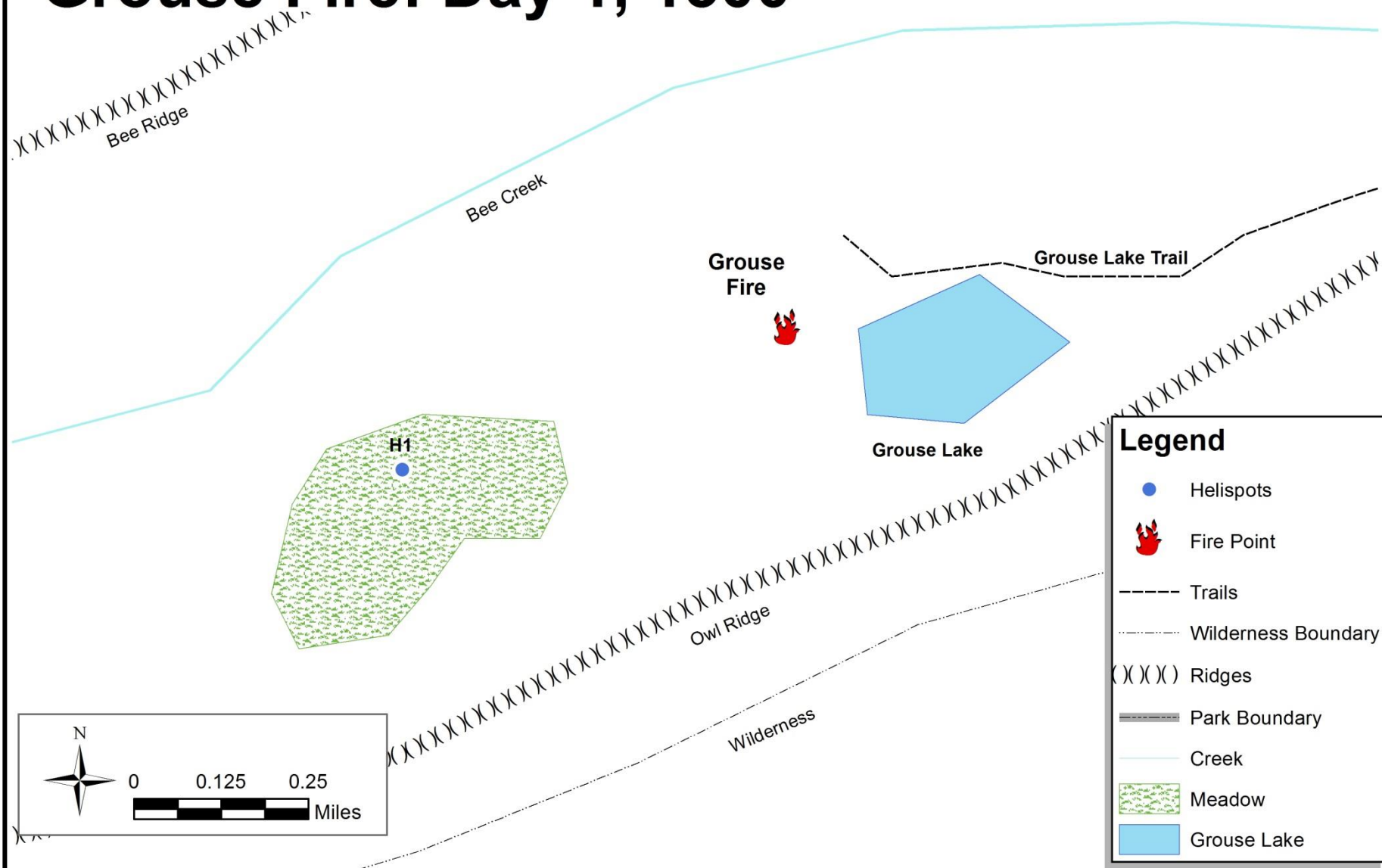
# DAY 1, 1305: What Nancy said....

- Fire name and location
- Size-up
- Resources assigned and ordered
- Incident Commander (IC)
- Expectations for READ\*



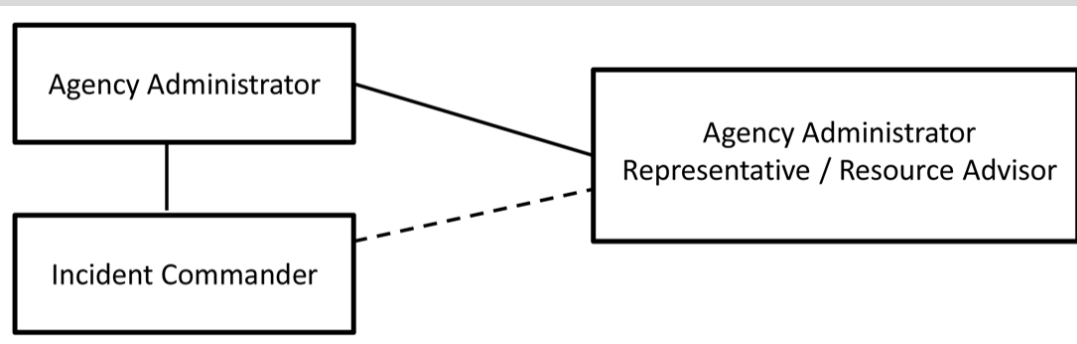
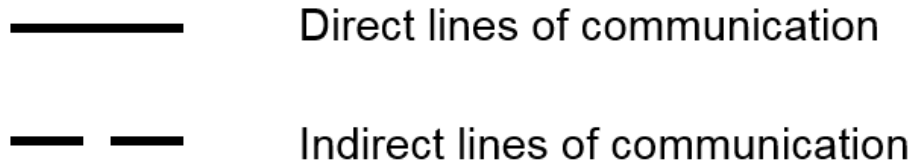


# Grouse Fire: Day 1, 1300





# Entering the Fray: READs & Incident Command System (ICS)

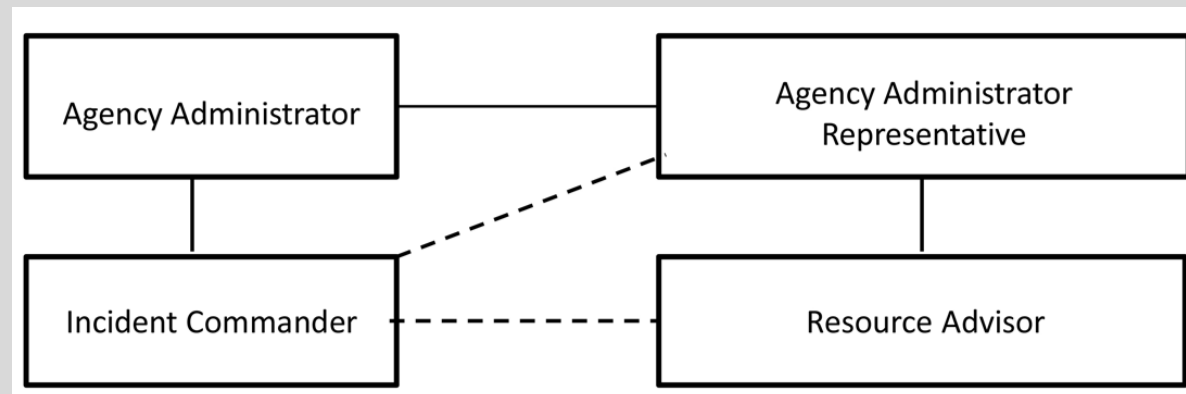


**Simple  
Scenario**

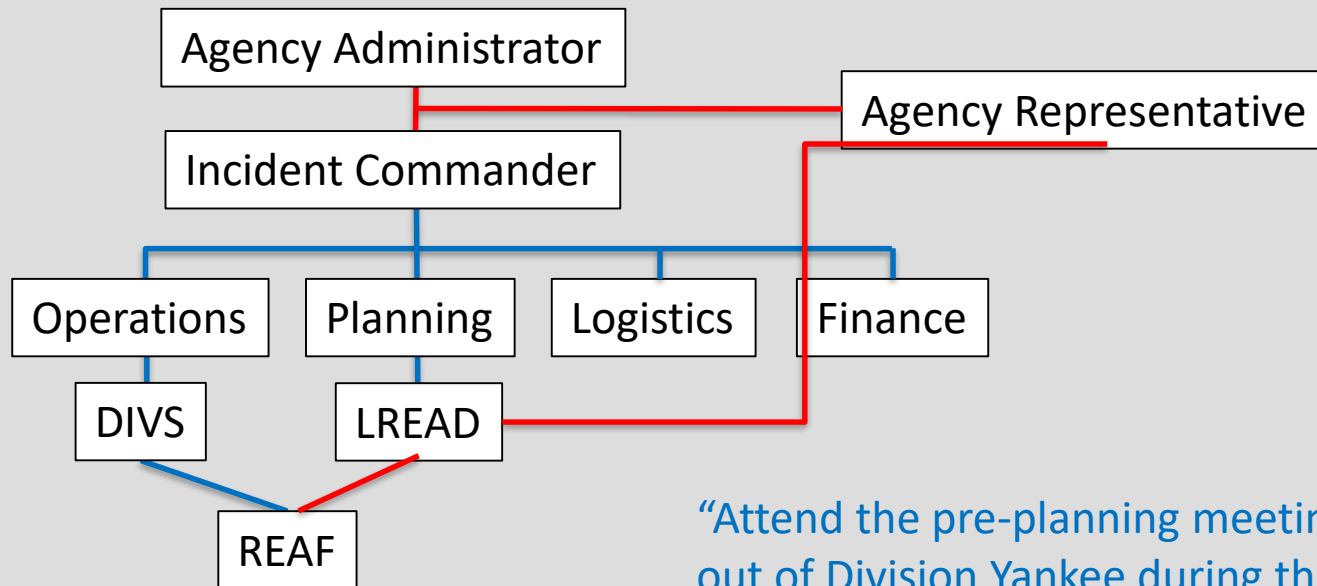


Pg. 57

**Complex  
Scenario**



# How does Resource Advising Fit into ICS ?

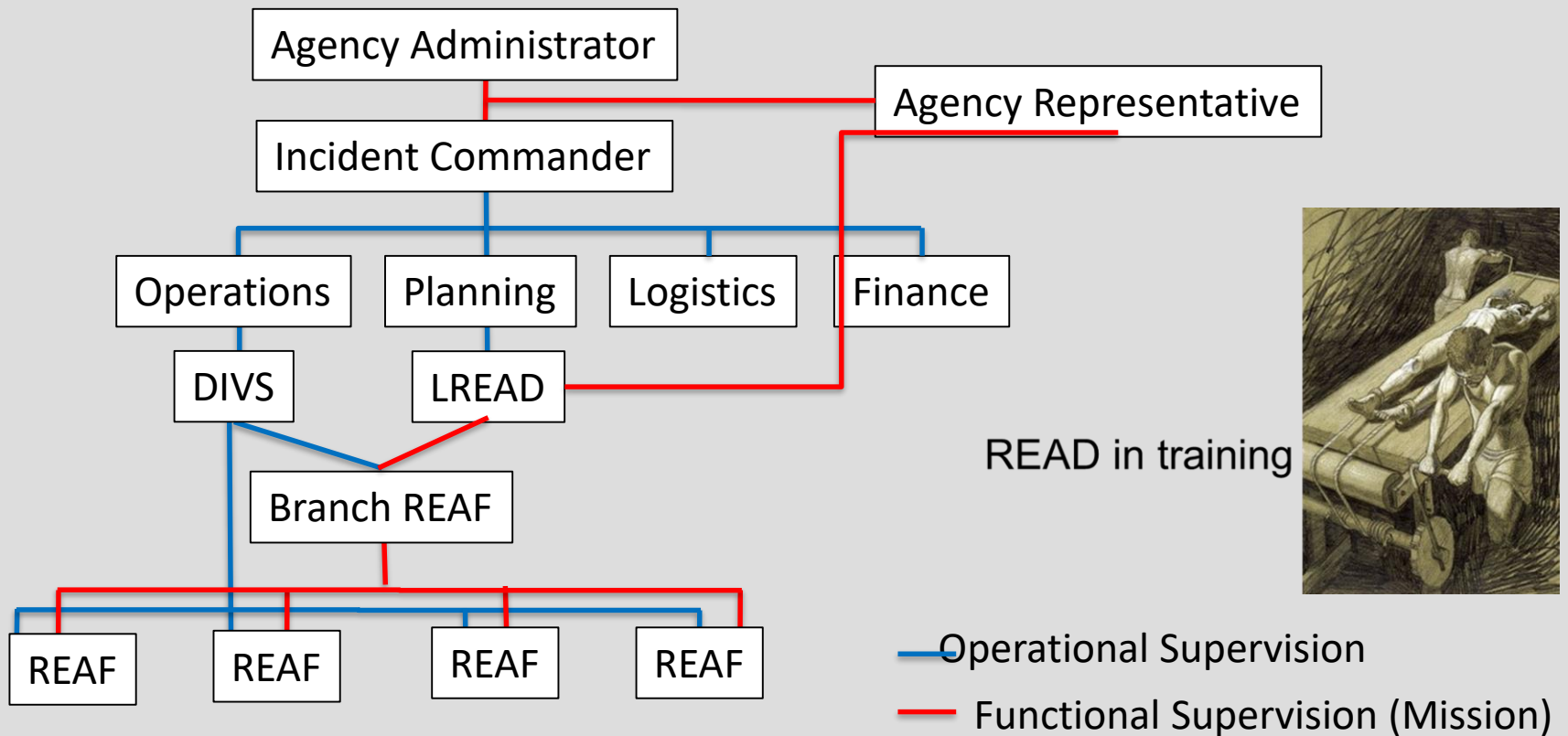


- Operational Supervision
- Functional Supervision (Mission)

“Attend the pre-planning meeting.” or “Stay out of Division Yankee during the burnout operation tomorrow.”

“We’re willing to compromise wilderness values and accept short-term impacts in order to protect endangered spotted owl habitat for longer-term benefits.”

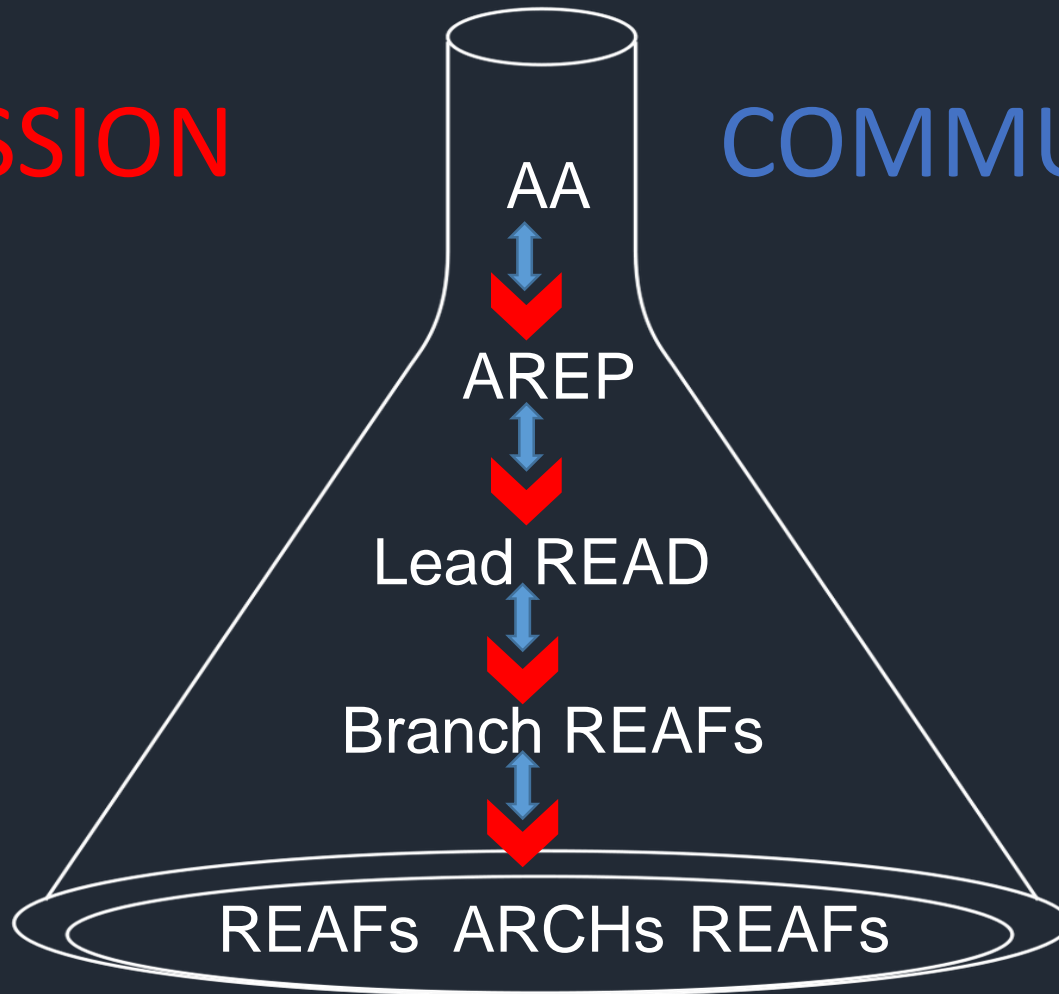
# How does Resource Advising Fit into ICS ?



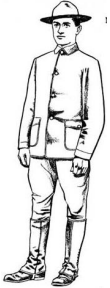


MISSION

COMMUNICATION



# We have a fire...now what?



= Oh, #\$.^&. Not on my watch!



= Going to get some serious OT and H-pay on this one!



= My *Copernicanicus magellanicus* research plots!

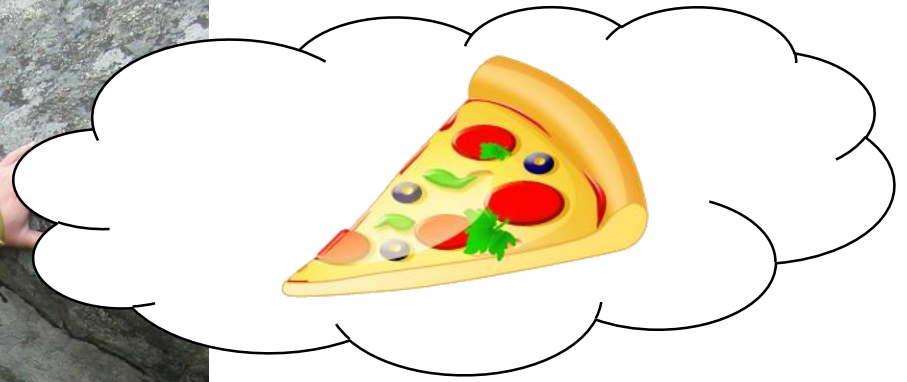


= I got this...

# Fire Gear and READ “Kit”



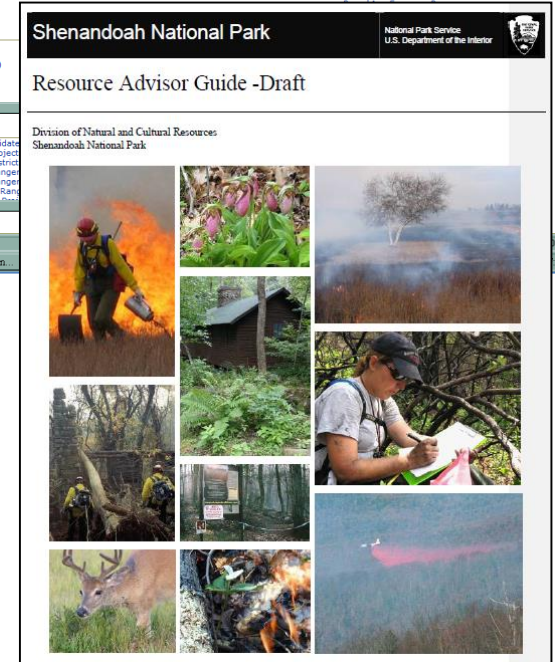
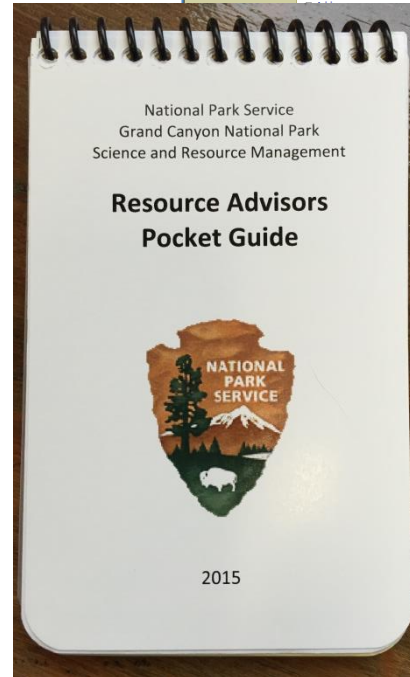
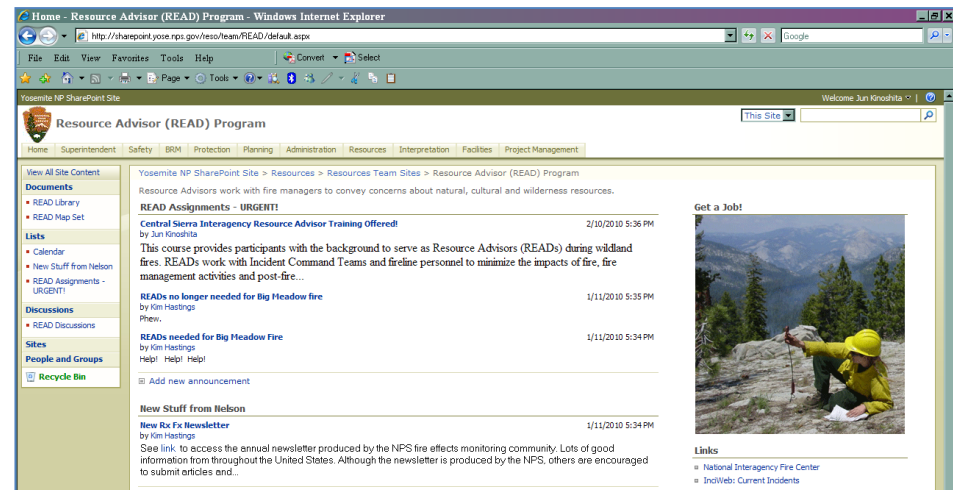




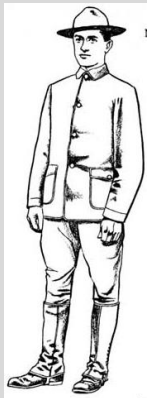
Inside Jun's  
Head...

# DAY 1, 1315: Initial Assessment

- Access GIS/Sharepoint “Kit”
  - Fire Management Unit
  - Fire history
  - Natural and cultural resources
  - Park infrastructure
- Upload data to GPS



# Fire in Time and Space...



What did we say  
we'd do?

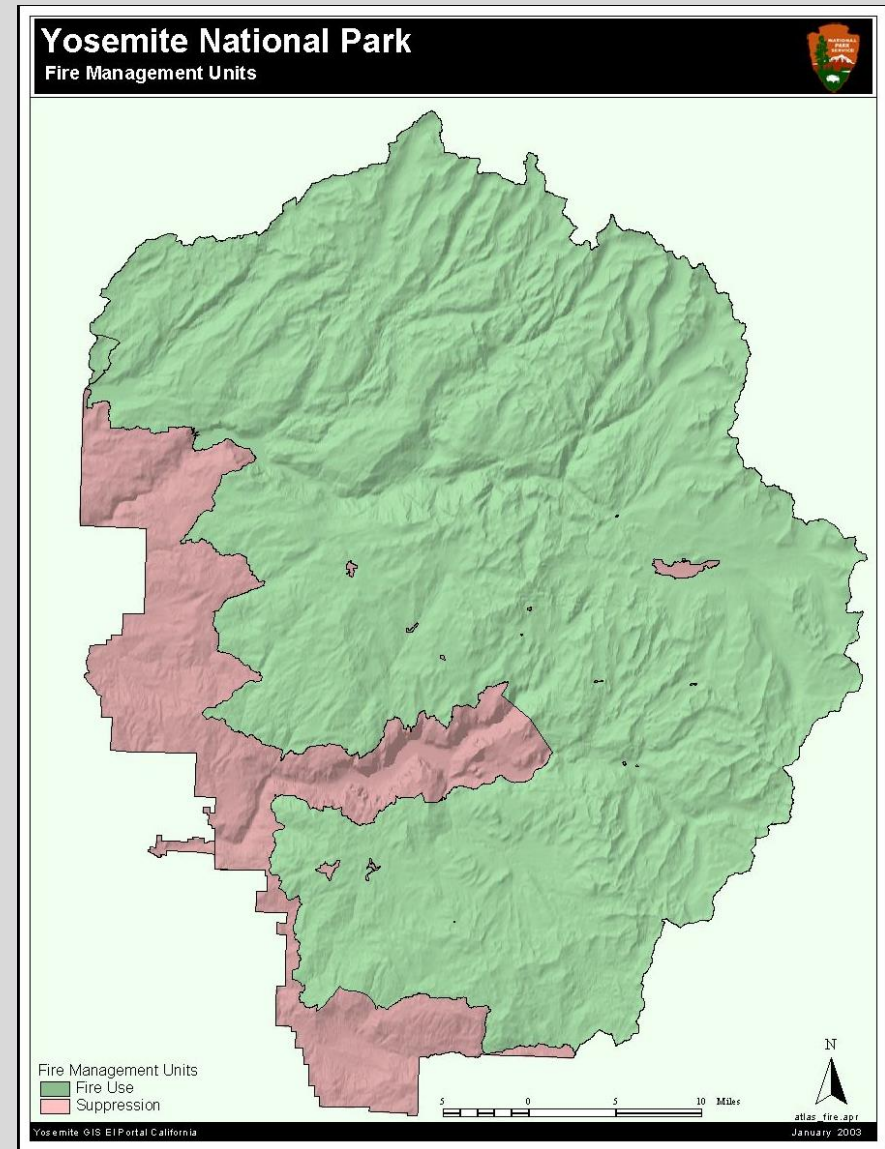
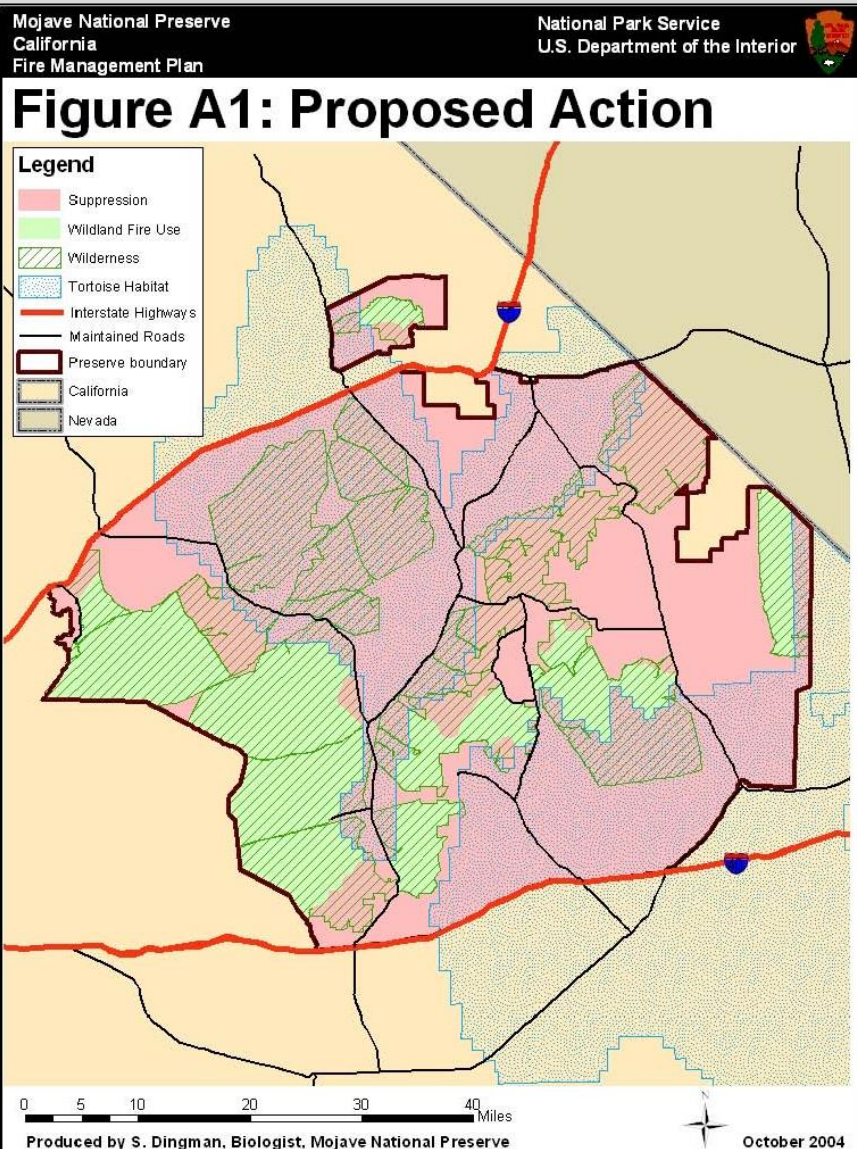
FMU: Fire Management Unit

FMU-1: Suppression

FMU-2:  
Multiple  
Objectives

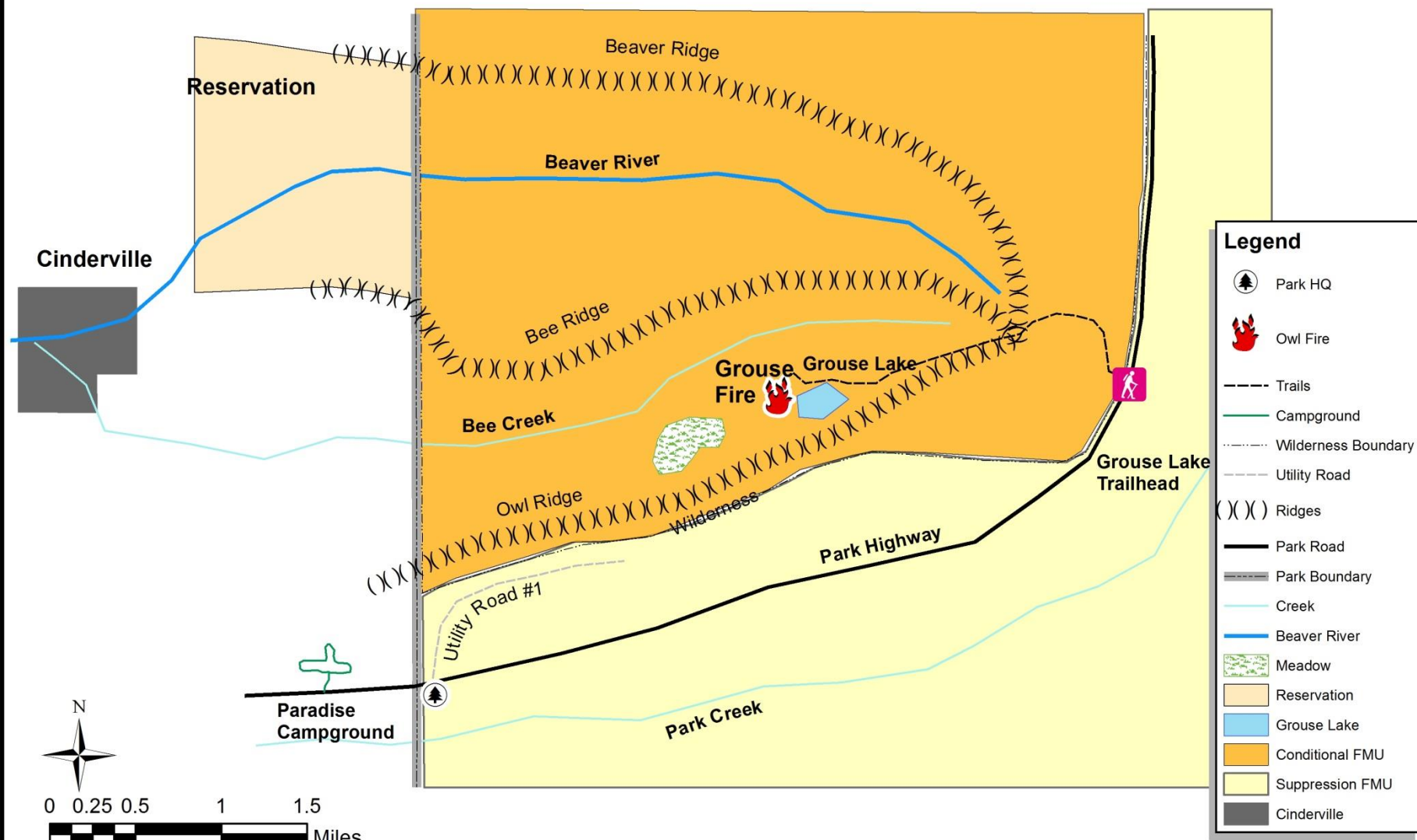


# Fire Management Units





# Big Fire NP: Fire Management Units







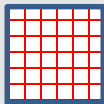


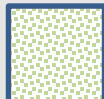


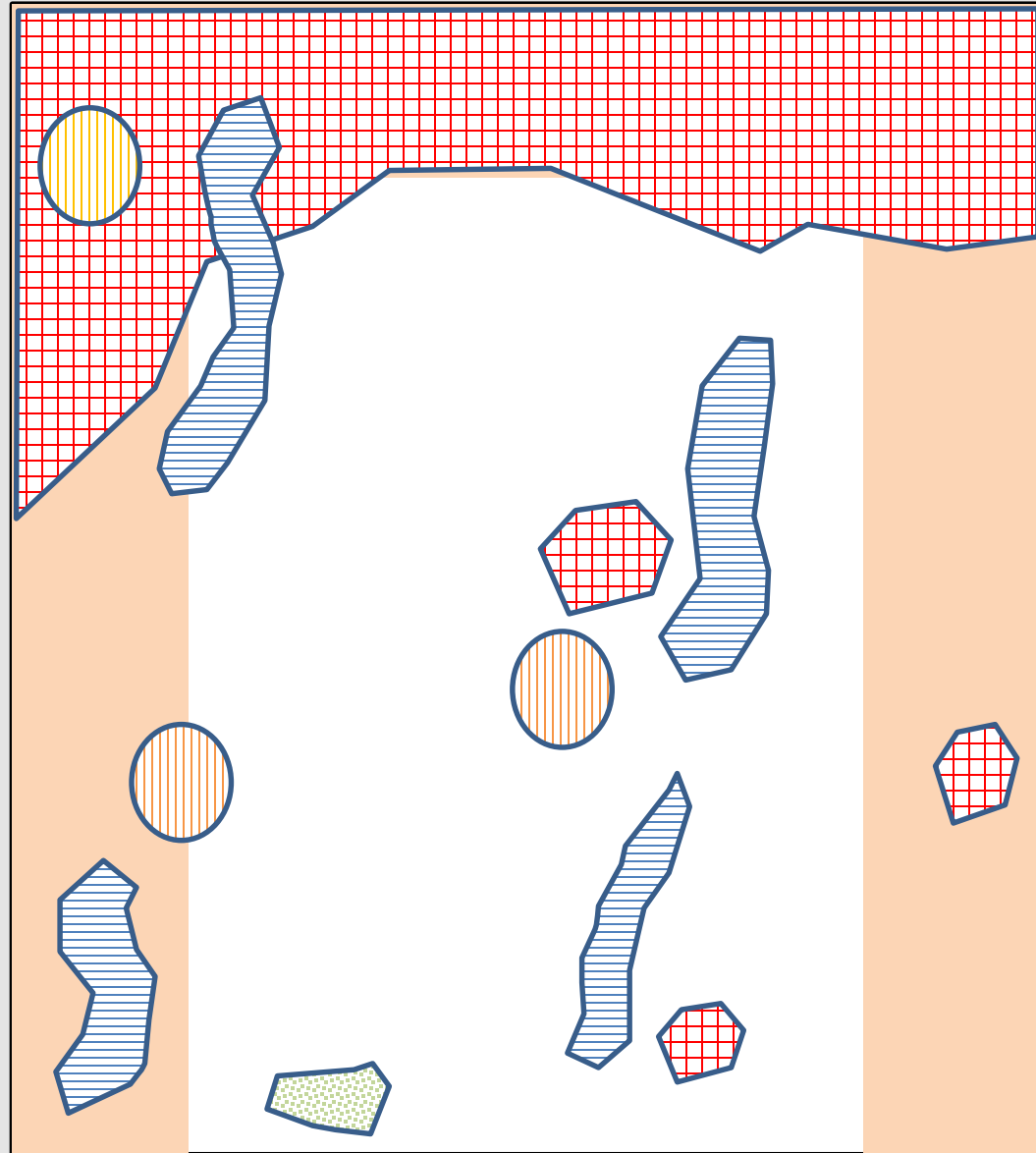


# Fire in Time and Space...

# What can we do?

# What can't we do?

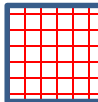

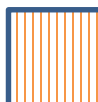
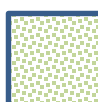
- No ground
-  = disturbance without Resource Advisor
- No retardant; no night operations
-  =
- No air ops (Feb-Jun)
-  =
- No dipping/retardant
-  =

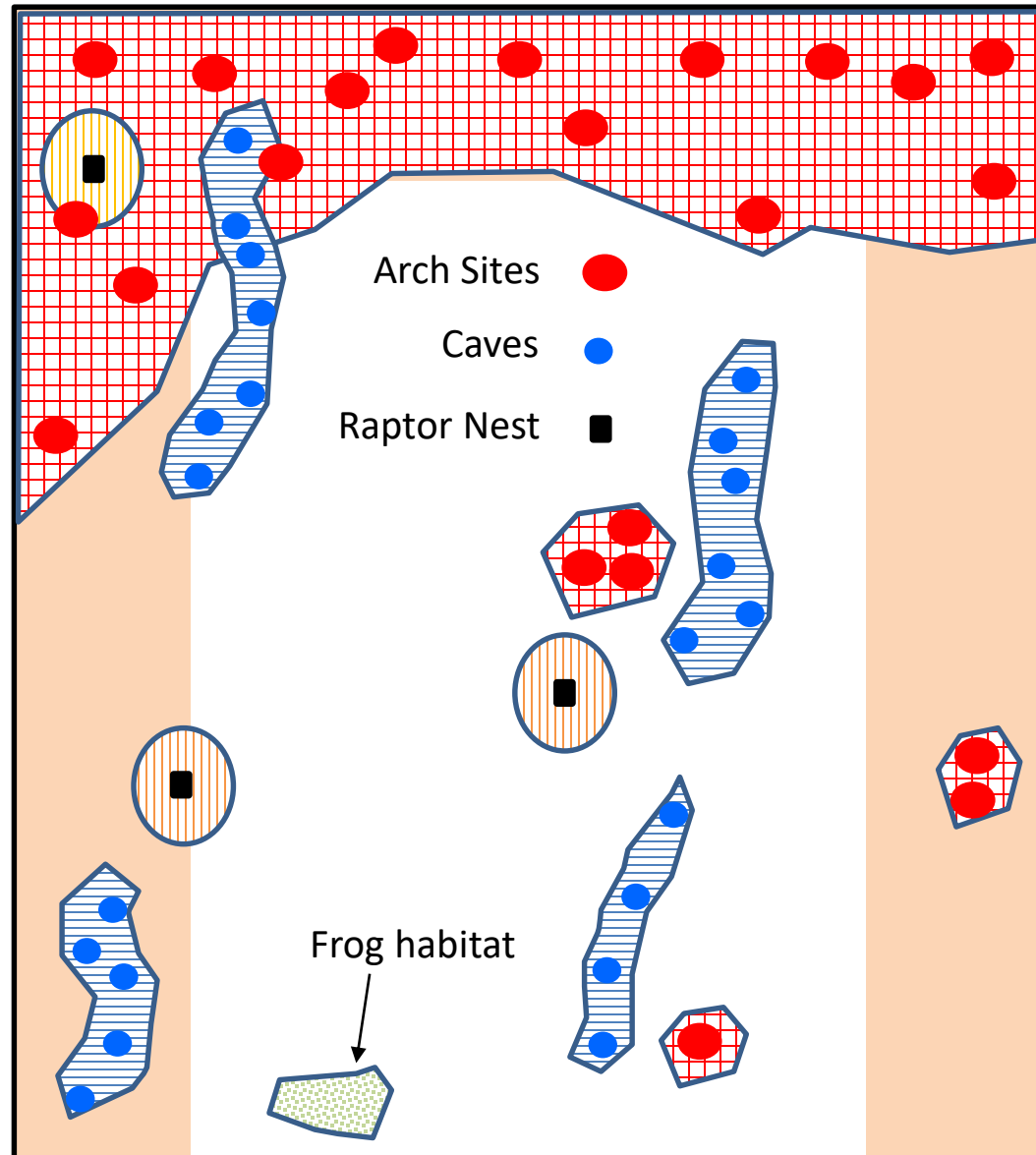




# Fire in Time and Space...

## Brass Tacks...

-  = No ground disturbance without Resource Advisor
-  = No retardant; no night operations
-  = No air ops (Feb-Jun)
-  = No dipping/retardant



# What are YOUR Resource Concerns?

Where would you go to find out more?

What documents would you reference?





# Types of Impacts

- Direct
- Operational
- Indirect



# Direct Impacts

Caused by fire and/or associated byproducts like smoke





# Operational Impacts

Result from fire management operations



Retardant-killed fish





# Indirect Impacts

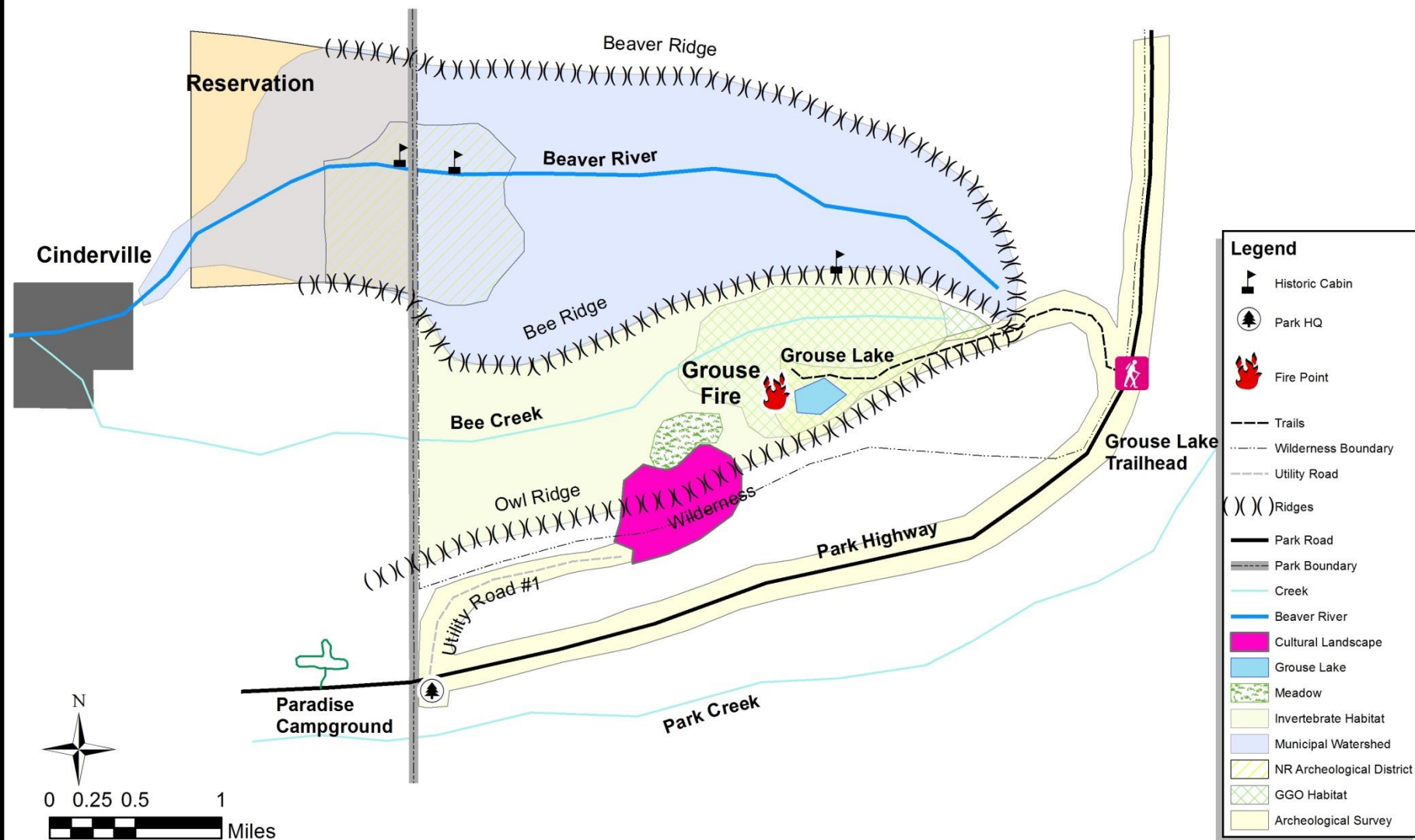
Caused by post-fire conditions resulting from fire and/or fire management operations







# Grouse Fire: Resource Concerns





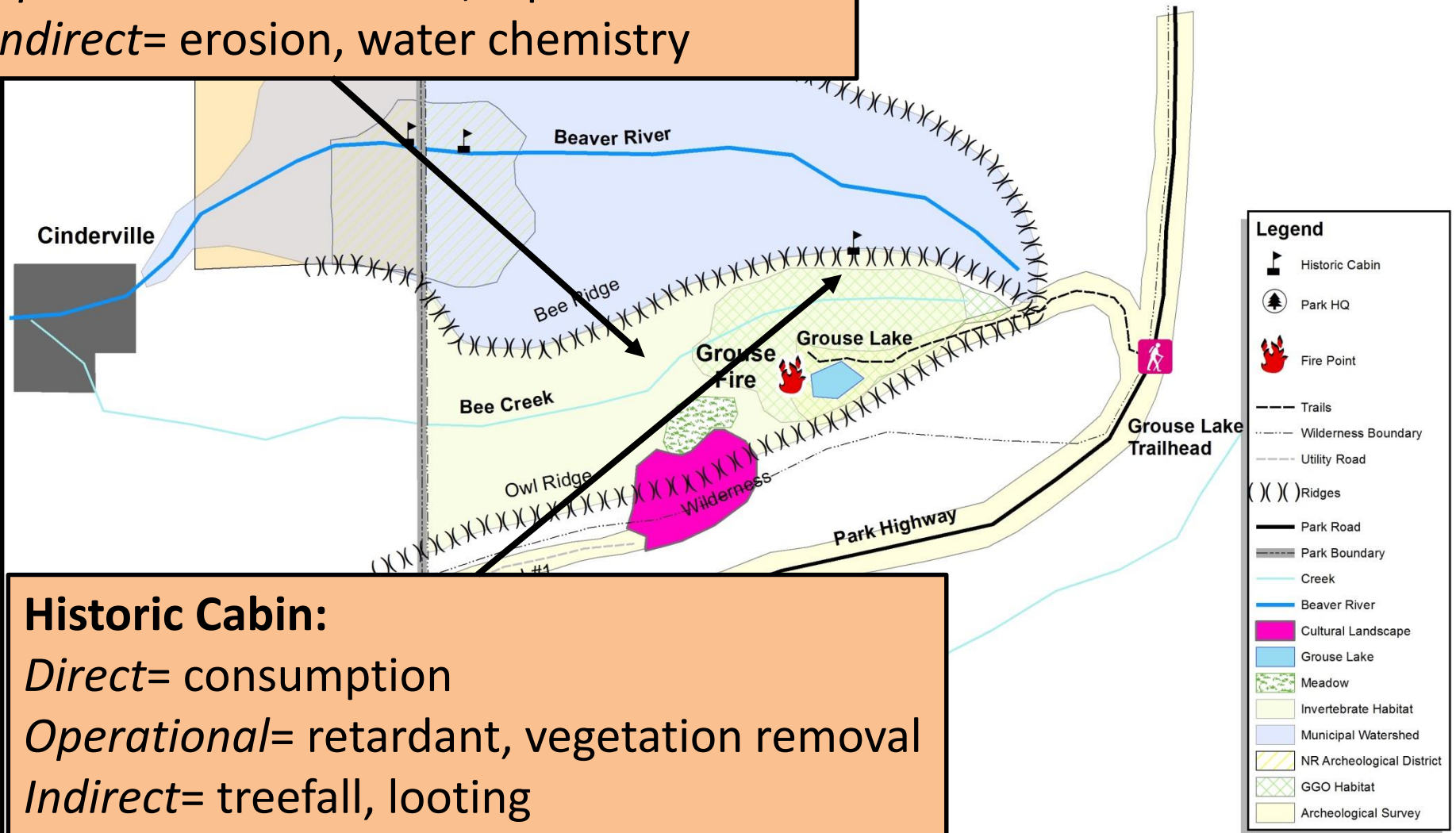
# Concerns

## Invertebrate Habitat:

*Direct*= high severity fire

*Operational*= retardant, aquatic invasives

*Indirect*= erosion, water chemistry



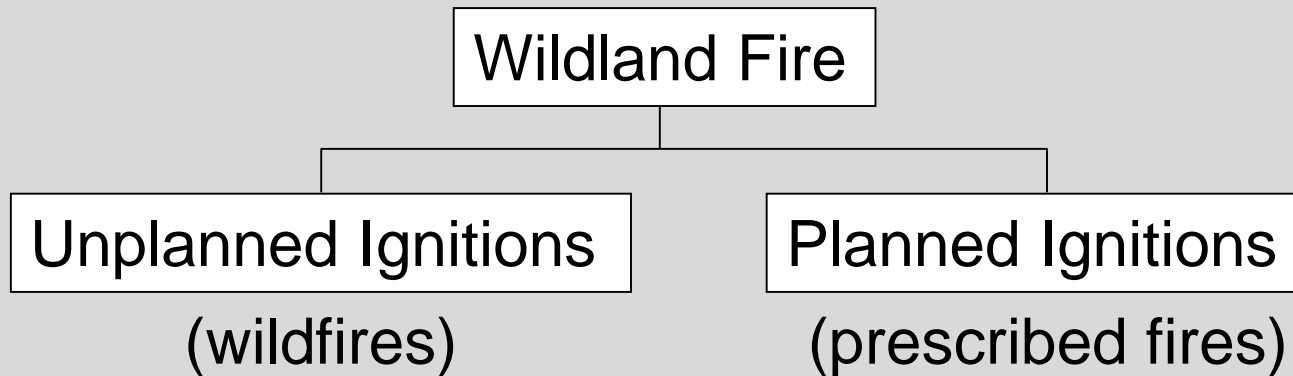
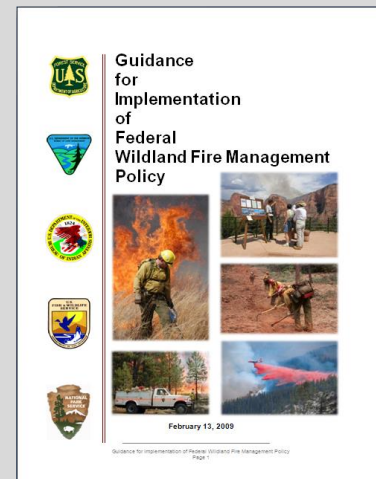
## Historic Cabin:

*Direct*= consumption

*Operational*= retardant, vegetation removal

*Indirect*= treefall, looting





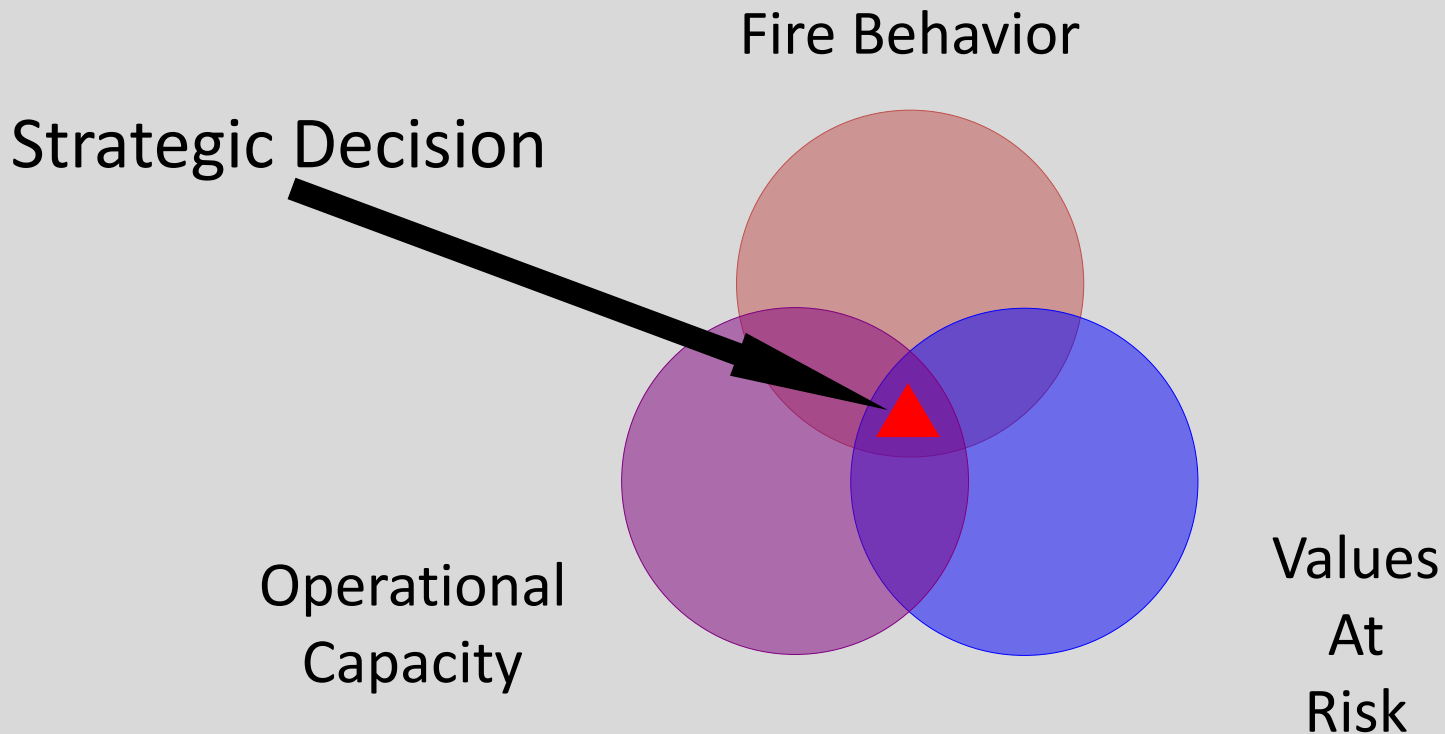
# Response to Wildfire

Encompasses all response actions to manage a wildfire

The full spectrum of tactical and strategic options are available

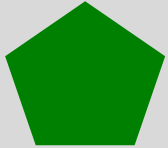


# Response to Wildfires

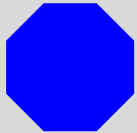




# Values at Risk



Safety



Resources—Natural, Cultural, etc.



Socio-political and Economic



Infrastructure

Extreme fire behavior




Wildland-Urban Interface



Holiday weekend





 Transmission Line


 Smoke

 Popular trail

Wilderness Values 

 Condor fledglings

 Non-native invasive species

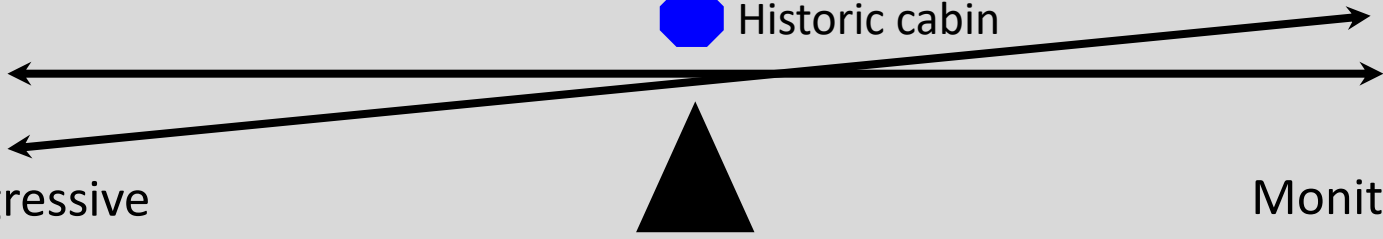
 Fire-vulnerable ecosystem

 Historic cabin



Full, aggressive  
perimeter control

Monitoring



Minimal fire behavior



Wilderness



Autumn



Smoke



Popular trail

Wilderness Values



Non-native invasive species



Fire-dependent ecosystem



Historic cabin



Full, aggressive  
perimeter control

Monitoring





# Grouse Fire Response...values at risk



- Wilderness Values
- Fire Ecology
- Invertebrate Habitat
- Owl Habitat
- Archeological District
- Cultural Landscape
- Historic Cabin

Full, aggressive  
perimeter control

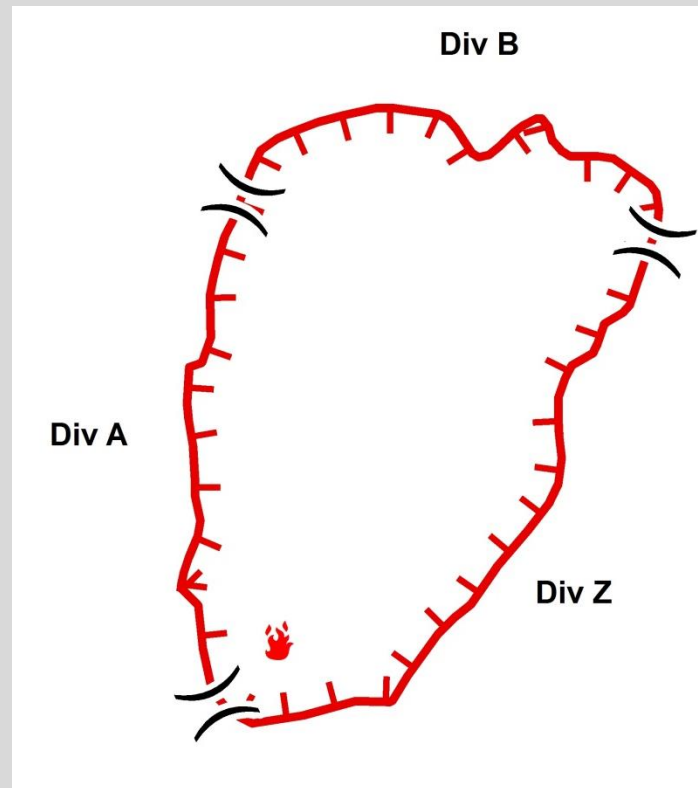
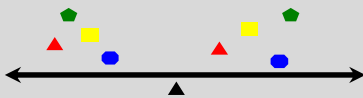
Monitoring

# Fire Tactics

Monitoring 

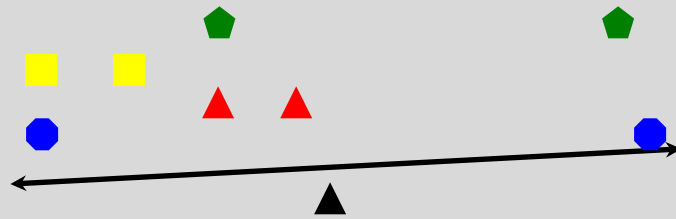
The diagram shows a horizontal double-headed arrow with a small black triangle at its center. Above the arrow, there are several colored markers: a green pentagon, a blue circle, a yellow square, a red triangle, another yellow square, another blue circle, and another green pentagon.

Indirect Line Construction With burnout

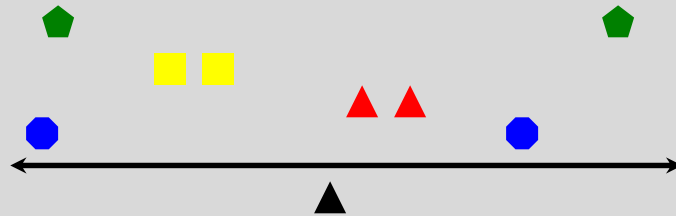


Direct Line Construction

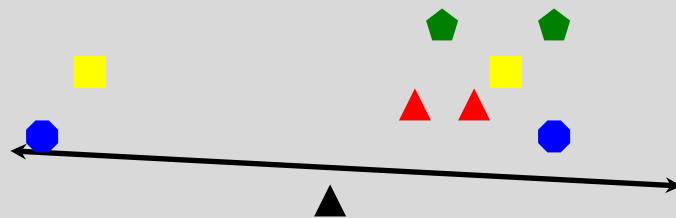




Week 1



Week 2



Week 3



# DAY 1, 1530: Fly into incident

- Fly over fire...grown to about 1.5 acres
- Use Park Helispot map to find nearest helispot...minimize efforts and impacts related to construction
- One located in meadow ca.  $\frac{1}{4}$  mi. from the fire
- Land and discover patch of bull thistle...inform pilot, flag with appropriate colored flagging, take waypoint



Bull thistle (*Cirsium vulgare*)

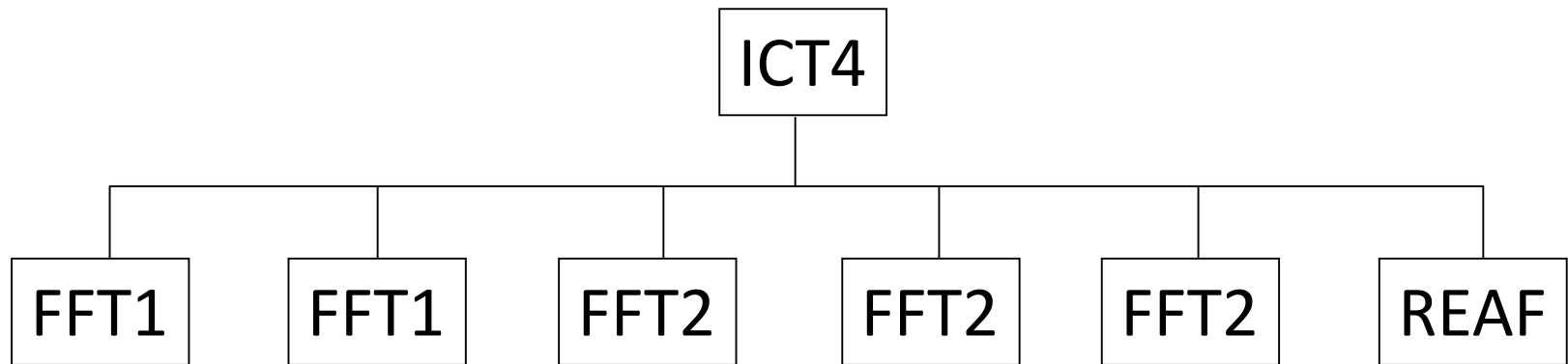
# Initial Response

Two types of initial response

- Type 5= Single resource and low complexity incident
- Type 4= Multiple resources, low to moderate complexity



# Grouse Fire ICS





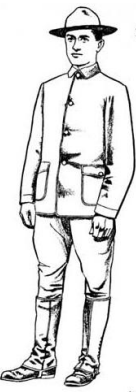
# DAY 1, 1545 Hike to Incident...

- IC sizes it up...spreading in all directions, isolated tree torching.
- Surrounded by heavy, dry fuels...lots of growth potential
- IC recommends aggressive suppression action
- Radios park FMO...taking aggressive suppression action, is air support available if necessary?

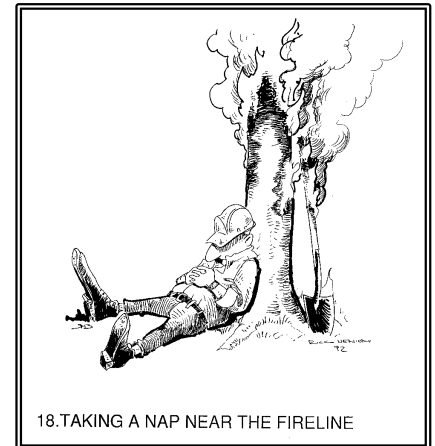
# DAY 1, 1615: What's the Deal?

- FMO: Why the heavy hand? This is the conditional use zone.
- IC: This thing is going to get huge.
- FMO: What about resource benefits? Let me take this to the Superintendent.

# DAY 1, 1630: The Superintendent Says ...



- What do you mean you want the fire to burn for resource benefit?
- What do you mean you want this fire to burn until winter?
- There's a hot air balloon rally this weekend, what about the smoke?
- What about the Cinderville water supply?
- Can I use fire money to fix the Tamale Ridge Road?
- Will I get my name in the paper?
- What is my risk?
- What's my reward?
- I'd rather not take the risk!



18. TAKING A NAP NEAR THE FIRELINE



# Grouse Fire Response...values at risk



Municipal Watershed



Smoke



Firefighter/Public Safety



Wilderness Values



Fire Ecology



Invertebrate Habitat



Owl Habitat



Archeological District



Cultural Landscape



Historic Cabin

Full, aggressive  
perimeter control

Monitoring







# DAY 1, 1645: Lower the Boom...

IC: Minimize fire size and time to containment (=Cost)





# Incident Action Plans (IAP)

- Outlines **INCIDENT OBJECTIVES** reflecting the overall incident strategy and the specific **TACTICS** for achieving these objectives.
- Includes relevant supporting information for the current or next operational period.
  - Operational period: Period of time scheduled for execution of a given set of tactical actions as specified in the IAP. Generally  $\leq 24$  hours.
- Simple incident = verbal  
Complex incident = written

# Incident Action Plan (IAP)

## THOMAS INCIDENT

### INCIDENT ACTION PLAN

12/26/2017 0700 - 1900

CA-VNC-103156  
PNLH77 (1502)



CALIFORNIA  
INCIDENT RESPONSE TEAM

INCIDENT OBJECTIVES	1. INCIDENT NAME Thomas Incident	2. DATE 12/25/2017	3. TIME 1900
4. OPERATIONAL PERIOD (DATE/TIME) 12/26/2017 0700-1900			
5. GENERAL CONTROL OBJECTIVES			
<b>Management Objectives</b> <ul style="list-style-type: none"><li>-Provide for and maintain public and first responder safety by utilizing the incident safety analysis process.</li><li>-Protect critical assets at risk to include the agricultural industry, historical assets within the affected area, infrastructure and improvements, watersheds, and transmission lines.</li><li>-Utilize tactics that consider protection of sensitive natural and cultural resources in the affected wilderness areas, the Sespe Wild and Scenic River, and the Sespe Condor Sanctuary.</li><li>-Ensure transparent, timely, and accurate communication at all levels of the incident.</li><li>-Be financially responsible for all assigned management and fire suppression tactics.</li><li>-Foster and enhance community and political relationships.</li></ul> <p>-All management actions and efforts will be focused on serving, safeguarding, and protecting the citizens and natural resources within Ventura County, Santa Barbara County, and Los Padres National Forest.</p>			
<b>Control Objectives</b> <ul style="list-style-type: none"><li>-Hold fire within the current southern perimeter to protect life and property values in the wildland-urban interface.</li><li>-Keep the fire south of the Mount Pinos Ranger District boundary to minimize impacts to the Sespe watershed, Sespe Wild and Scenic River, and the Sespe Wilderness.</li><li>-Keep the fire east of Gibraltar Road and north and east of 5N16 Road to minimize exposure and duration of incident.</li><li>-Hold fire within the current eastern perimeter to minimize impact to the condor sanctuary, oil fields, and wilderness.</li></ul>			
7. WEATHER FORECAST FOR OPERATIONAL PERIOD See attached.			
8. GENERAL SAFETY MESSAGE L.C.E.S. Utilize this tool for all of your operations I.A., mop-up, rehab, snags, driving, etc. Discuss how it can be used for any operation.			
9. Attachments (if attached)			
<input checked="" type="checkbox"/> Organization List (ICS 203) <input checked="" type="checkbox"/> Medical Plan (ICS 206) <input type="checkbox"/> Finance <input checked="" type="checkbox"/> Unit Log 214			
<input checked="" type="checkbox"/> Weather Forecast <input checked="" type="checkbox"/> Air Ops 220 <input checked="" type="checkbox"/> Training Message <input type="checkbox"/>			
<input checked="" type="checkbox"/> Fire Behavior Forecast <input type="checkbox"/> Ops Expectations/ DIVS worksheet <input checked="" type="checkbox"/> Supply Message/ 101 <input type="checkbox"/>			
<input checked="" type="checkbox"/> Safety Message <input checked="" type="checkbox"/> Assignment List (ICS 204) <input checked="" type="checkbox"/> Demob Plan <input type="checkbox"/>			
<input checked="" type="checkbox"/> Communications Plan (ICS 205) <input checked="" type="checkbox"/> Archaeologist message <input type="checkbox"/> Traffic Plan <input type="checkbox"/>			
10. PREPARED BY (PLANNING SECTION CHIEF) 		11. APPROVED BY (INCIDENT COMMANDER) 	

Division/Group Assignment List (ICS 204 WF)					
1. Incident Name: THOMAS		3. Branch: II		Division/Group: YY/QW	
2. Operational Period: Date/Time From: 12/26/2017 0700		Date/Time To: 12/26/2017 1900		TUE	
4. Operations Personnel					
OPERATIONS CHIEF PATRICK RUSSELL JOHN LANE		PLANNING OPS MIKE APPLING ALEX KICATH (T)		SME APPLING ALEX KICATH (T)	
BRANCH DIRECTOR RICHARD HERRERA		DIVISION/GROUP SUPERVISOR TOMAS C GONZALEZ		TOMAS C GONZALEZ	
SAFETY JOHN STRICKLAND		AIR ATTACK SUPERVISOR MARK SABERACKI		MARK SABERACKI	
5. Resources Assigned this Period					
Strike Team / Task Force / Resource Designator	LWD	Leader	Number Persons	Drop OR PT/Time	Pick Up PT/Time
TFLO O-25052	0100	WILL D BURKS	1	DP 120800	CP1900
HC21 NAA-NAVAJO SCOUTS 1 C-25059	1209	CHARLES Z SMITH	22	DP 120800	CP1900
HC21 STT - SOUTHERN IDAHO C-25057	1209	CORTNEY M DAVIS	21	DP 120800	CP1900
HC21 BOF BOISE REGULARS-2 C-25056	1209	JOHN T WAGNER	21	DP 120800	CP1900
ENG3 TMU-43 E-25158	0104	PHILIP HEITZKE	5	DP 120800	CP1900
ENG3 CMF-ENTRAT RD E-25194	0105	TIMOTHY DELPH	5	DP 120800	CP1900
ENG3 CMF-CLE ELLUM RD E-25193	0105	DYLAN HOLM	5	DP 120800	CP1900
ENG3 MNF -34 E-25162	0104	BRIAN COMBS	5	DP 120800	CP1900
ENG3 BOF-30 E-25163	0105	ROMALDO NAVARRO	5	DP 120800	CP1900
WT52 PVT -O'CONNELL E-25071		JEFF FORTIS	1	DP 120800	CP1900
WT52 PVT -JARDINE'S E-25072		PAUL HERMAN	1	DP 120800	CP1900
READ O-25144	0103	TON MURPHY	1	DP 120800	CP1900
REAF O-25008	1209	QUINTAN GARCIA	1	DP 120800	CP1900
REAF O-25198	0101	ALICIA BONSCHOWSKI	1	DP 120800	CP1900
6. Division/Group Communication Summary					
Function	Channel	RX Frequency NW	RX Tone/NAC	TX Frequency NW	TX Tone/NAC
COMMAND	2	168.1050		170.4500	146.2
TACTICAL	9	154.2875	156.7	154.2875	156.7
AIR TO GROUND	14	159.3450	192.8	159.3450	192.8
MEDICAL	15	156.0750	156.7	156.0750	156.7
EMERGENCY	16	168.6250		168.6250	110.9
8. Prepared By (Resource Unit Leader) JENNY KRUEGER		Approved By (Planning Section Chief) CARRIE DENNEY		Date 12/25/2017	Time 2100
ICS 204 WF (114)		FINAL		Page 1 of 2	

# DAY 1, 1645: Grouse Fire IAP

- Marching orders: “Take aggressive suppression action”...minimize fire size and time to containment with hand line
- What are the tactical implications?
  - Attempt direct control
  - Will need more resources...hand crews, air support





DAY 1, 1650: “So we’re going to need a helispot around here...”



# MIST: Minimum Impact Strategies and Tactics

- Minimum approach necessary to **safely** and **effectively** achieve stated objectives
- Consistent with land and resource management objectives as expressed in FMP

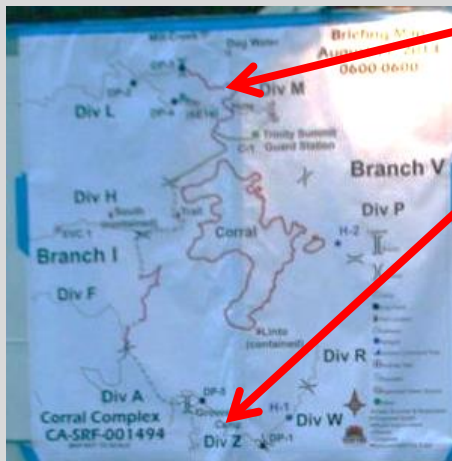




# Strategy vs. Tactic

## Strategy

The general plan of action. Informed by the Incident Objectives which are determined by the Agency Administrator.



MIST

### Control Objectives:

Keep the fire:

1. East & South of the Hoopa Valley Indian Reservation
2. North of Lone Pine Ridge
3. West of the defensible ridgeline running through Grizzly Camp & Trinity summit along the county line, which had contingency line built in 2009 during the Backbone Fire.
4. South of the Forest Road 8N10

### Incident Objectives:

1. Provide for firefighter & public safety in all incident operations
2. Protect property & infrastructure. Control fire closest to communities
3. Keep stakeholders, the public, & cooperators informed of fire status.
4. Keep costs commensurate with identified values at risk.
5. Protect cultural & natural resources.
6. Protect wilderness value & utilize MIST in the Trinity Alps Wilderness



# Strategy vs. Tactic

## Tactic

The means by which a strategy is operationally executed.



**Control Objectives:**

Keep the fire:

1. East & South of the Hoopa Valley Indian Reservation
2. North of Lone Pine Ridge
3. West of the defensible ridgeline running through Grizzly Camp & Trinity summit along the county line, which had contingency line built in 2009 during the Backbone Fire.
4. South of the Forest Road 8N10

**Incident Objectives:**

1. Provide for firefighter & public safety in all incident operations
2. Protect property & infrastructure. Control fire closest to communities
3. Keep stakeholders, the public, & cooperators informed of fire status.
4. Keep costs commensurate with identified values at risk.
5. Protect cultural & natural resources.
6. Protect wilderness value & utilize MIST in the Trinity Alps Wilderness

MIST

# MIST / Not MIST



Bulldozer

Flapper





# MIST/Not MIST



Chemical Retardant

Water





# MIST/Not MIST



Felling Snags

Protecting Snags



# MIST/Not MIST



Cross-Cut Saw

Chainsaw





# MIST/Not MIST



Constructed Helispot

Natural Opening





# MIST/Not MIST

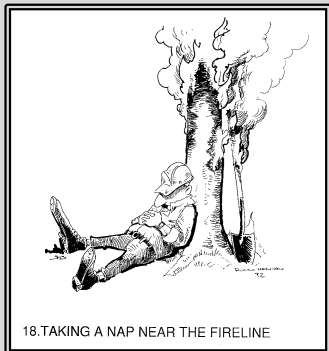


# Context, Context, Context



ALL ABOUT OBJECTIVES!

Taos Pueblo, NM



18. TAKING A NAP NEAR THE FIRELINE





# DAY 1, 1650: Grouse Fire MIST Considerations

- Park has standardized MIST guidelines ...knowledgeable crew
  - Retain snags where safely possible
  - Fireline size should reflect fireline behavior
- What about specific issues?





# DAY 1, 1655: MIST Recommendations

- Wilderness: Fire is in designated Wilderness
- Bears: Remind about bears and food
- Owl Habitat: Direct flights away from nest/habitat
- Dipping: Can we use Grouse Lake? Results of frog survey? Water from Park Creek invasives?

# DAY 1, 1715: IC Back on Radio to FMO

- Not able to catch fire...getting too big too fast even with help
- Bomber with retardant? No, very sensitive watershed for aquatics. Shot in the dark anyway.
- Need more ground resources, time to reevaluate objectives...probably better to back off and go indirect.

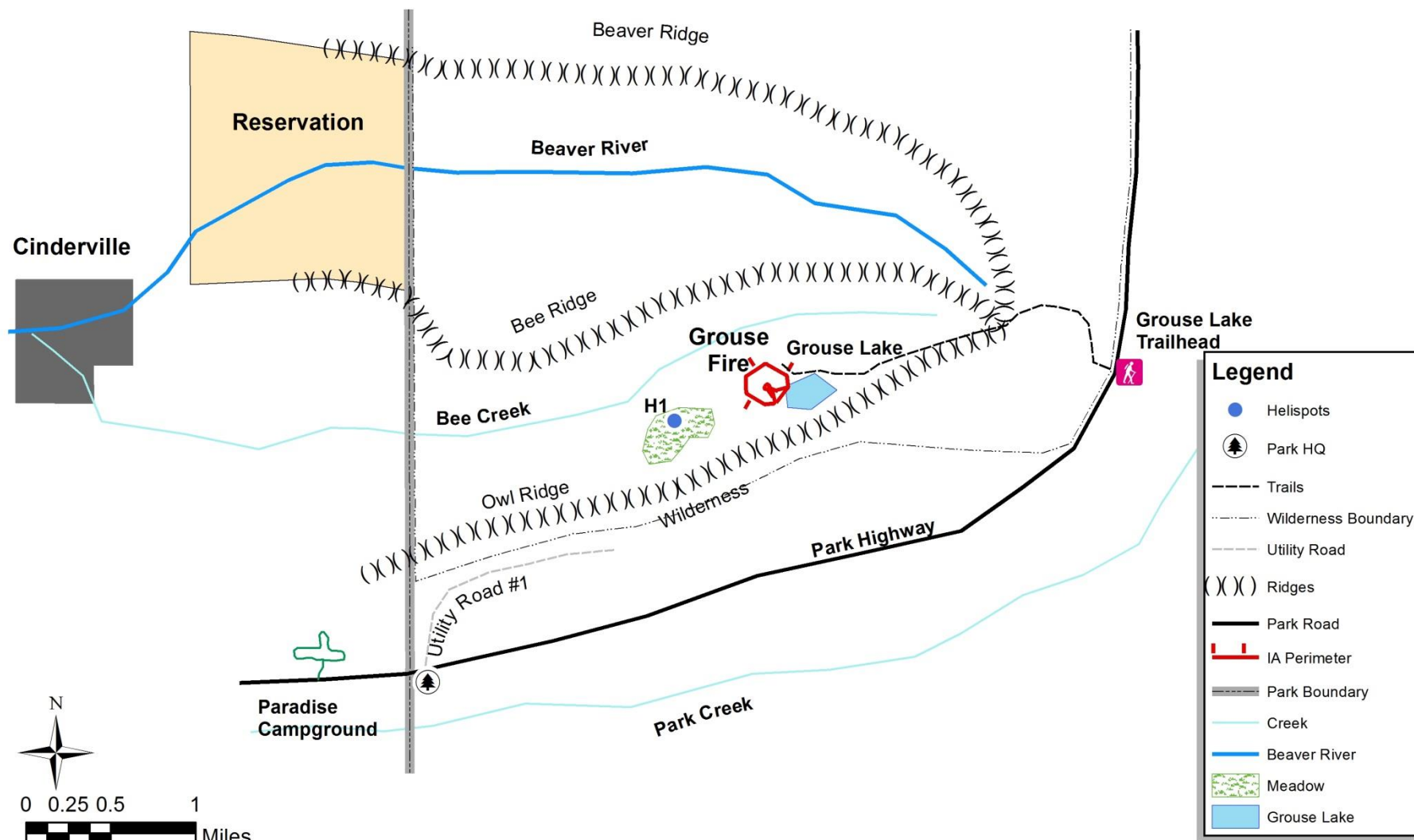
# DAY 1, 1730: Updated Direction

- Battalion 31 will assume ICT3 responsibilities...send in the rest of Crew 7, Mt. Bullion...ICT4 will fill role of OSC.
- Forget about north flank...keep fire from entering Park Creek watershed...cut line along ridge, burn out if necessary.
- Do Wildland Fire Decision Support System (WFDSS)...looking like it is going to a Type 2 incident.





# Grouse Fire Status: Day 1, 1730



# DAY 1, 1730: Updated Direction cont.

- Jun will need to come out to help with WFDSS
- Need REAF on incident...contact dispatch...Echo Davenport is available. Will fly out with Crew 7 at 1900.
- Jun will brief her and fly out to HQ

# DAY 1, 1735



“In case of  
emergency,  
Dial 911”





# DAY 1, 1735: “Things don’t look so good”

- Jun briefs Cedar on the fire—current status, short and long-term prognosis
- Cedar asks lots of questions:
  - What are your issues?
  - What is the availability of local resources?
  - Do you need me to come up there?
  - Is there someone I can tie in with locally?
  - Do you think we’ll need a BAER team?
  - What is the account number?
  - Is there anything I can do for you right now?

# Crunching the Numbers

- Cedar and Jun work on potential numbers of REAFs/READs needed
  - Three READs to work in ICP, including Cedar
  - Two REAFs per division to work on fireline, plus Jun...assume three divisions
- The park's capacity is limited. Only Jun and Echo for the immediate future.
- Cedar will line up five REAFs and two READs to work in ICP...look for experienced people
- Jun will notify IC...will let Cedar know if we want to pull the trigger

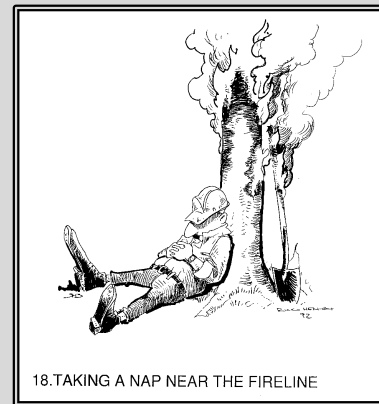


# Local vs. Non-Local Resource Advisors

- Locals
  - Pro
    - Local knowledge and connections
    - Access to equipment and information
  - Con
    - Distracted by day job, personal stuff
- Non-Locals
  - Pro
    - Undivided attention
  - Con
    - Learning curve

## Best Scenario....

- Mix of local and non-local personnel
- Lots of local personnel available



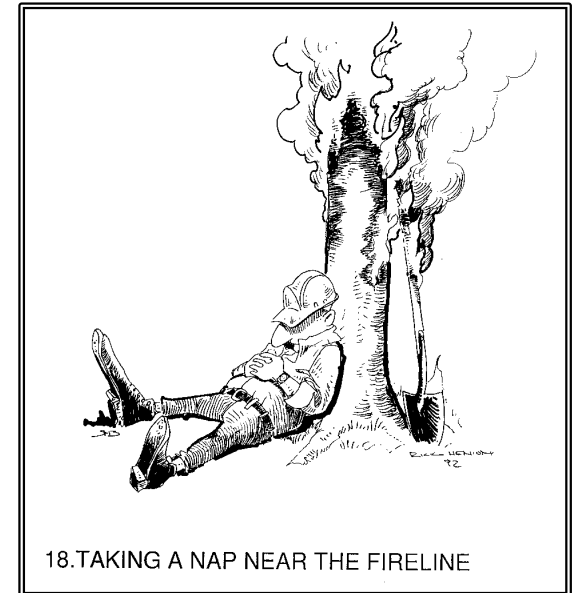
What Division should Resource Advisors come from?

# DAY 1, 1745: “Tell dispatch to give me a call”

- Jun confirms with IC to order Cedar for the incident
- Dispatch calls Cedar by telephone...
  - “What do you want to be ordered as?”
  - “When are you planning to arrive?”

# DAY 1, 1800: Resource Order

- Park Dispatch places the Resource Order through the Puget Sound Interagency Coordination Center (aka PSC)...Cedar's home dispatcher
- Ordered as a **"Name Request"**





## INCIDENT QUALIFICATION CARD

Printed <b>06/27/19</b>	Name <b>Drake, Cedar</b>	Employee ID <b>00001001566</b>
RT-130 Exp <b>06/05/20</b>	<b>WA-NCP</b> North Cascades National Park	Fitness <b>Arduous</b> Expires <b>06/05/20</b>

## QUALIFIED POSITIONS

Status	Position	Description	Curr Exp
Q	FFT2	Firefighter Type 2	05/03/24
Q	READ	Resource Advisor	08/08/23
Q	THSP	Technical Specialist	
Q	FEMO	Fire Effects Monitor	05/03/24
Q	FFT1	Firefighter Type 1	05/03/24
<b>Fold Card Here</b>			
Q	HECM	Helicopter Crewmember	07/30/21
Q	BOTA	Botanist	06/05/23
Q	REAF	Resource Advisor, Fireline	08/08/23
T	FAL3	Basic Faller	08/02/18
T	FIRB	Firing Boss, Single Resource	06/27/22

Certifying Official <i>Switzel</i>	Title <i>FMO</i>	Date <i>6/27/19</i>
---------------------------------------	---------------------	------------------------

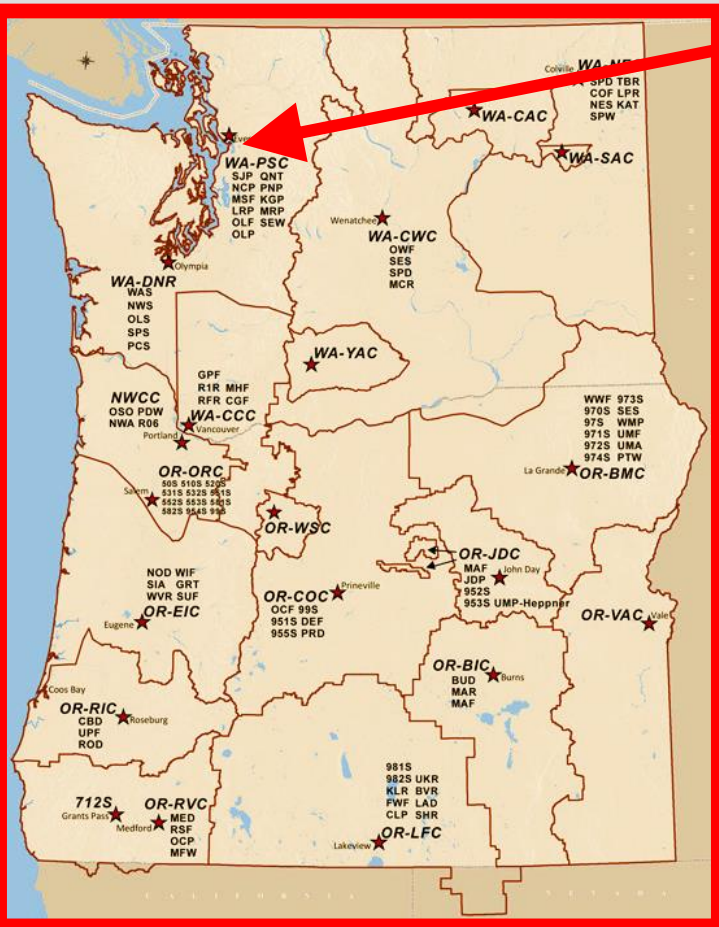
# Resource Orders

**NEW in 2020 !!!**

The Resource Order Request and Status System (ROSS) (IROC)

Local Dispatch Center  
Puget Sound Interagency  
Coordination Center  
(PSC)

Geographic Area  
Coordination Center  
Northwest Coordination  
Center (NWCC)



# DAY 1, 1815: Waiting for the call...

- Ready line gear and red bag
- Ready READ/BAER “Box” and contact numbers
- Make travel arrangements (assume full 14-day assignment)...authorization, rental vehicle, etc.
- Start making telephone calls
  - Jun....what do I need to know?
  - READs with needed specialties across region...are they available and willing?
  - National BAER Coordinator (Rich)







BAER

The BAER Lair...  
location undisclosed





# PWR READ List

Last	First	Park/Unit	Profession	Overhead READ	Line READ
Acree	Marty	YOSE	Restoration Work Leader		
Allen	Sarah	PORE	Science Advisor		
Arguello	Leonel	REDW	Supervisory Botanist	Yes	Yes

Beatty	Sue	YOSE	Resource Management	
Boyers	Laurel	YOSE	Wilderness Coordinator	
Brigham	Christy	SAMO	Restoration Ecologist	
Buhler	Monica	YOSE	Fire Effects Crew Supervisor	
Bush	Kelly	NOCA	Wilderness District Ranger	
Caprio	Tony	SEKI	Fire Ecologist	
Chaney	Sarah	CHIS	Restoration Ecologist	
Conca	Dave	OLYM	Archeologist	
Cooper	Kim	PORE	Biological Technician	
Cunningham-Summerfield	Ben	YOSE	Interpretive Ranger	
Dethlefs	Brandon	YOSE	Lead Forestry Technician	
Dougherty	Dennis	HAVO	Archeologist	Yes
Dueser	Curt	LAME	Resource Management Specialist	
Faulkner	Kate	CHIS	Natural Resource Management Chief	
Fauth	Gregg	SEKI	Wilderness Coordinator	
Fincher	Mark	YOSE	Wilderness Specialist	
Fisher	Timothy	BIHO	Park Ranger	
Forrestel	Alison	PORE	Fire Ecologist	Yes
Forrestel	Alison	PORE	Fire Ecologist	Yes
Foster	Dan	WICA	Resource Management Chief	Yes







# Cultural Resources



**Joe Svinarich-WHIS**  
**ARCHEOLOGIST (FIRE)**  
*Quals:* REAF, ARCH, BACS,  
 National BAER Team  
 member  
*Physical:* Arduous





# Vegetation/Weeds



**Alison Forrestel-PORE**

FIRE ECOLOGIST

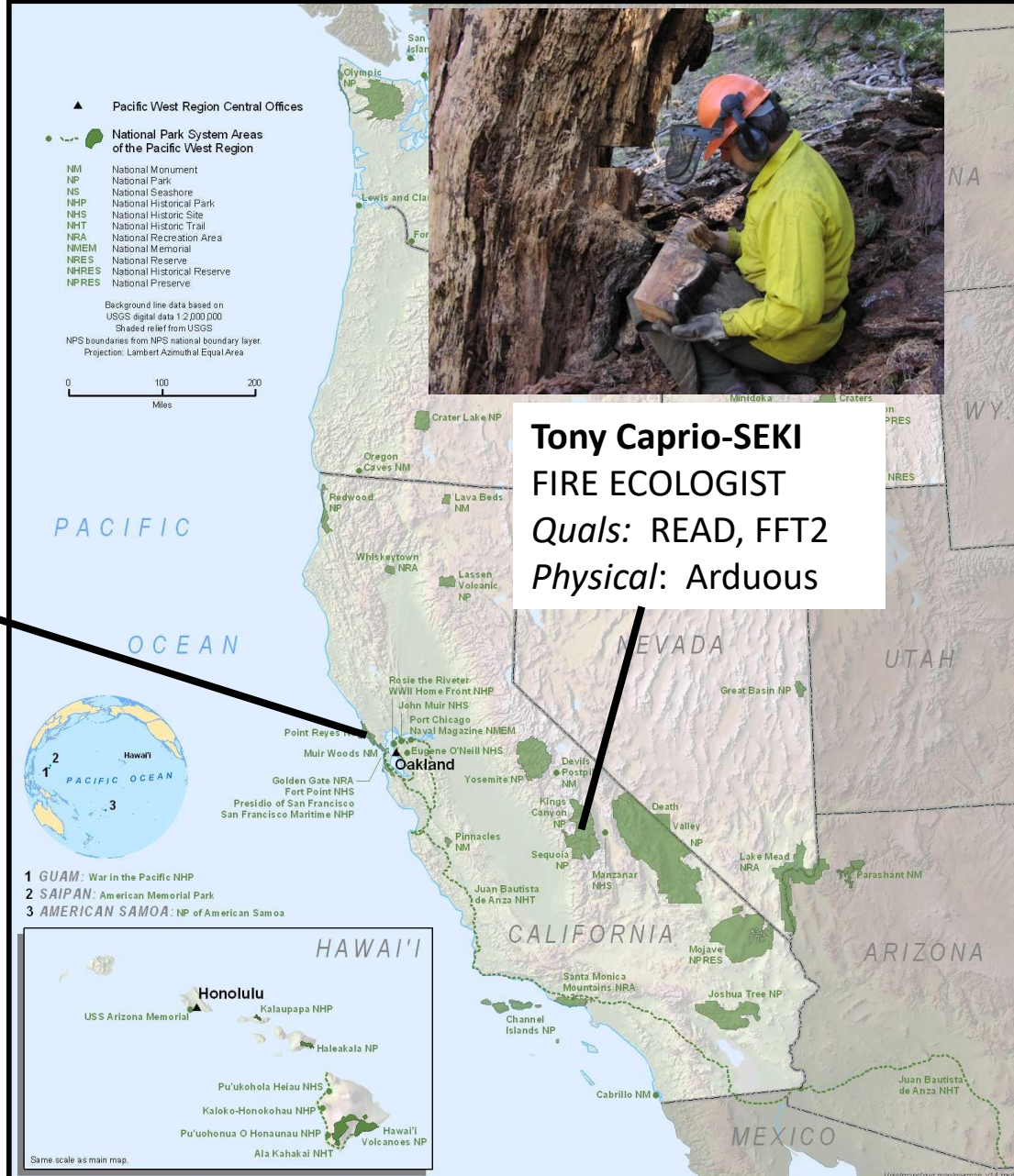
*Quals:* REAF, GISS, FFT2

*Physical:* Arduous

## Pacific West Region

National Park Service

U.S. Department of the Interior





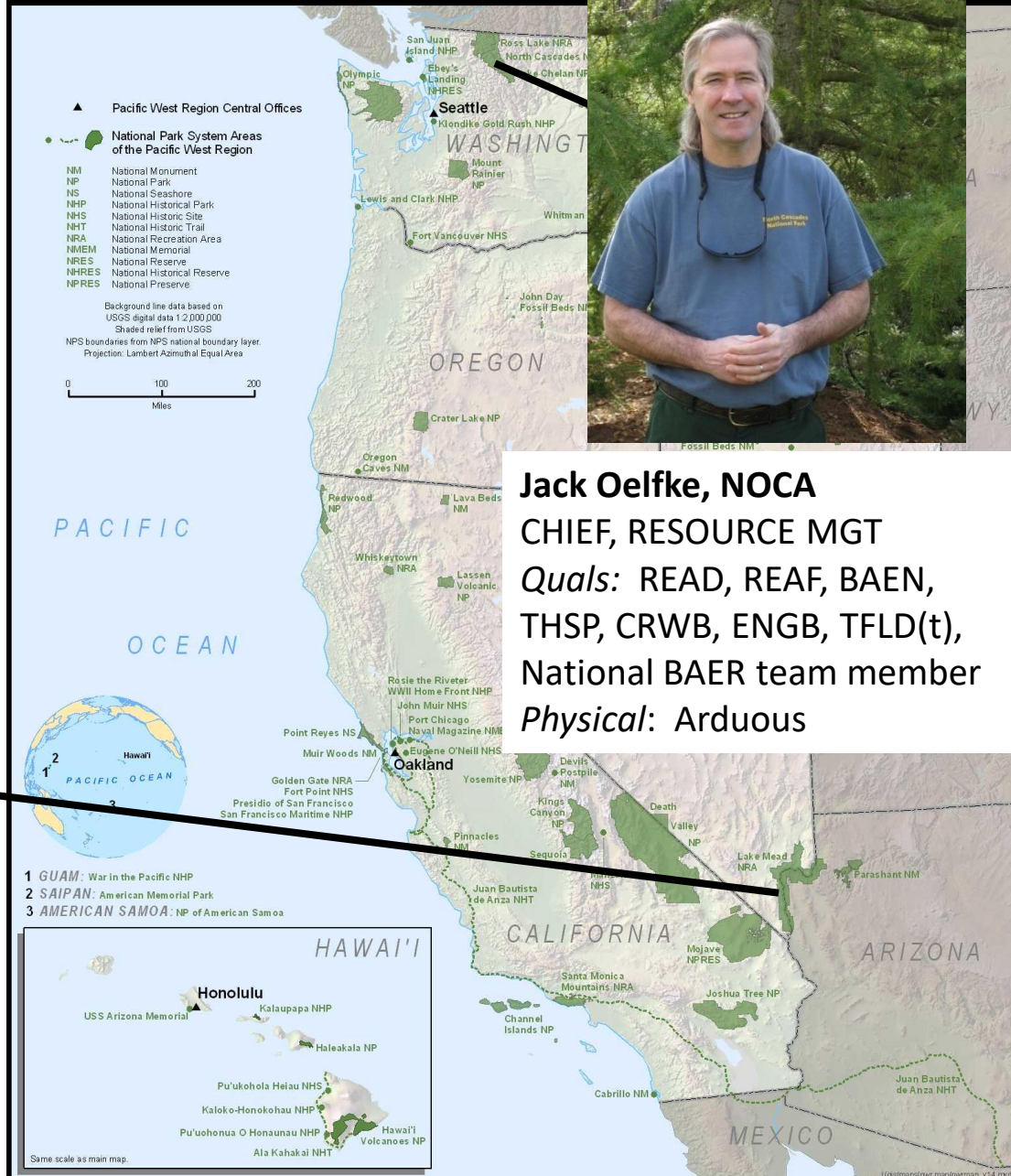
# Wildlife



**Sandee Dingman-LAME**  
BIOLOGIST

*Quals:* PIOF, FEMO, BAEN, BABI, BABO, BAEL, BIOL, BOTI, ENSP, GISS, READ, REAF, THSP, PIO2(t), National BAER team member  
*Physical:* Arduous

## Pacific West Region National Park Service U.S. Department of the Interior





# GIS



**Kent Van Wagtendonk,**  
**YOSE**

**GEOGRAPHER-FIRE GIS**  
**SPECIALIST**

*Quals:* REAF, READ,  
GISS, FFT2

*Physical:* Arduous

## Pacific West Region

National Park Service

U.S. Department of the Interior



# Deputy READ



**Marti Witter, SAMO**

**FIRE ECOLOGIST**

*Quals: READ*

*Physical: None*

## Pacific West Region

National Park Service

U.S. Department of the Interior



# Information Exchange

- To READs:
  - Nature of assignment, values at risk, account number, logistical information, timeframe, etc.
- From READs
  - When are they available to be ordered and as what qual
  - What equipment would they bring...laptop, GPS, tablet, camera, radio, cell phone, etc.
    - Get these approved on their Resource Order



# DAY 1, 1900: North Ops Calls...

- Do you want to take the assignment?
- When are you leaving and from where?
- How are you traveling (air, govt. vehicle, rental vehicle, etc.)?
- When do you anticipate arriving at the incident?
- Tell them if bringing a laptop, cell phone, radio, tablet, GPS, etc.

RESOURCE ORDER	Initial Date/Time	2. Incident / Project Name				3. Incident / Project Order Number <b>CA-SNF-000745</b>		Financial Codes P5LOBG(0515) [P] ABH CFAA - CA FIRE ASSIST AGR CFMA - CA COOP FIRE MGMT AGR SOA CC 73837040	
OVERHEAD	07/13/18 2136	FERGUSON				4. Office Reference Number		9. Jurisdiction / Agency Sierra National Forest	
5. Descriptive Location FERGUSON		6. TWN	RNG	SEC	Base MDM	8. Incident Base / Phone Number GREG COTTON 559-500-4546 MATT 310-9389-0305 559-500-4544 HARKIE 661.304.3770 KEVIN HARPER 661-330-0209 CA-SICC (Dispatch) 559-500-4544 CA-SICC (Dispatch) 559-500-4546		10. Ordering Office Sierra Interagency ECC	
		3S	19E	29	Mt. Diablo, CA				
		LAT. 37 39 07 N							
		LONG. 119 52 51 W							
11. Aircraft Information									
Bearing	Distance	VOR	Contact Name	Frequency Type	Assigned Frequency	Reload Base	Other Aircraft / Hazards		
322	36	FRA		Command	RX172.2250/TX164.7875 Sierra Fire 146.20	MPI	Aerial Cable - 37 39 26 N 119 54 51 W		
31	36	HYP		Tactical	168.600 R5 Tac 3 000.00	O22	Aerial Cable - 37 39 29 N 119 52 39 W		
343	46	CZQ		Air to Ground	163.1000 (DECK)	FAT			
				Air Tactics	AIR TACTICS 172.4750 000.00	MCC			
				Air to Air	118.95 VHF (P) 000.00	PTV			
				Tactical	168.250 NIFC TAC 7				
				Tactical	166.775 NIFC TAC 6				
				Air to Ground	Air to Ground 168.4000 000.00				
				Tactical	166.725 NIFC TAC 5 000.00				
				Air Tanker Base Ground Control / Operations	123.975 Fresno Air Base VHF 000.00				

**“O-Number” Name + Qual**

**Anticipated Arrival**

Page: 2 of 2  
Run Date: 8/4/2018 20:38 CDT  
Server: rossreports.nwcg.gov

12. Request Number	Ordered Date/Time	From	To	Qty	Resource requested	Needed Date/Time	Deliver To	From Unit	To Unit	Assigned Date/Time	Resource Assigned Unit ID	Resource Assigned	M/D Ind	Estimated Time Of Departure	Estimated Time Of Arrival	Released Date	Released To
O-1423	08/04/18 1334 PST	CA-SICC (Dispatch) 559-500-4546	CA-SICC		RESOURCE ADVISOR (READ) (Drake, Cedar (WA-PSC))	08/07/18 2000 PST	FERGUSON	WA-SICC	CA-SICC	08/04/18 1529 PST	WA-NCP	Drake, Cedar (WA-PSC)	M	08/06/18 0800 PST	08/07/18 2000 PST		
Travel Mode AOV		Financial Code CFAA - OFFICE ASSN AGR		Special Needs Justification: Cedar Drake will replace the Lead READ who is timing out. He has extensive local knowledge on the development and implementation of suppression repair, especially for lands that fall under the jurisdiction of the USFS and NPS. Cell phone, computer, Rental vehicle, AOV, POV authorized.										Reporting Instructions Awahnee Hills Regional Park 3469 Hwy 49 Awahnee, CA			
13. User Documentation																	
Req. No.																Entered By	
O-1423	General message 850															Thomas Evans (CA-SICC) 08/04/2018 1335 PST	
O-1423	Justification: Cedar Drake will replace the Lead READ who is timing out. He has extensive local knowledge on the development and implementation of suppression repair, especially for lands that fall under the jurisdiction of the USFS and NPS.															Thomas Evans (CA-SICC) 08/04/2018 1335 PST	
O-1423	Request O-1423 - RESOURCE ADVISOR (READ) - [CA-SNF-000745] FERGUSON has been filled with Drake, Cedar (WA-PSC) by Juan Ortiz@WA-PSC ROSS.															Juan Ortiz (WA-PSC) 08/04/2018 1529 PST	
O-1423	Called and Spoke with Jack, the Lead READ. Authorized is GPS, tablet computer, portable radio, and camera.															Juan Ortiz (WA-PSC) 08/04/2018 1838 PST	

**Special Instructions & Authorizations**

**ICP Address**



# DAY 1, 1900: Ramping Up

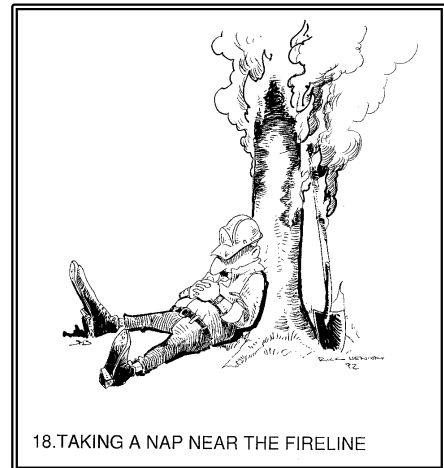
- Battalion 31 assumes IC3...IC4 goes to OSC
- Crew 7 arrives with Echo in tow, Mt. Bullion 15 minutes behind, two ships doing shuttles
- Type 2 IMT has been ordered

# Extended Attack

- Type 3 incident
- Initial attack capabilities have been exceeded
- More fire fighting resources and increased complexity
- Additional Command and General Staff function (Operations) staffed
- Longer duration?

# DAY 1, 1905: Jun Briefs Echo on Fireline

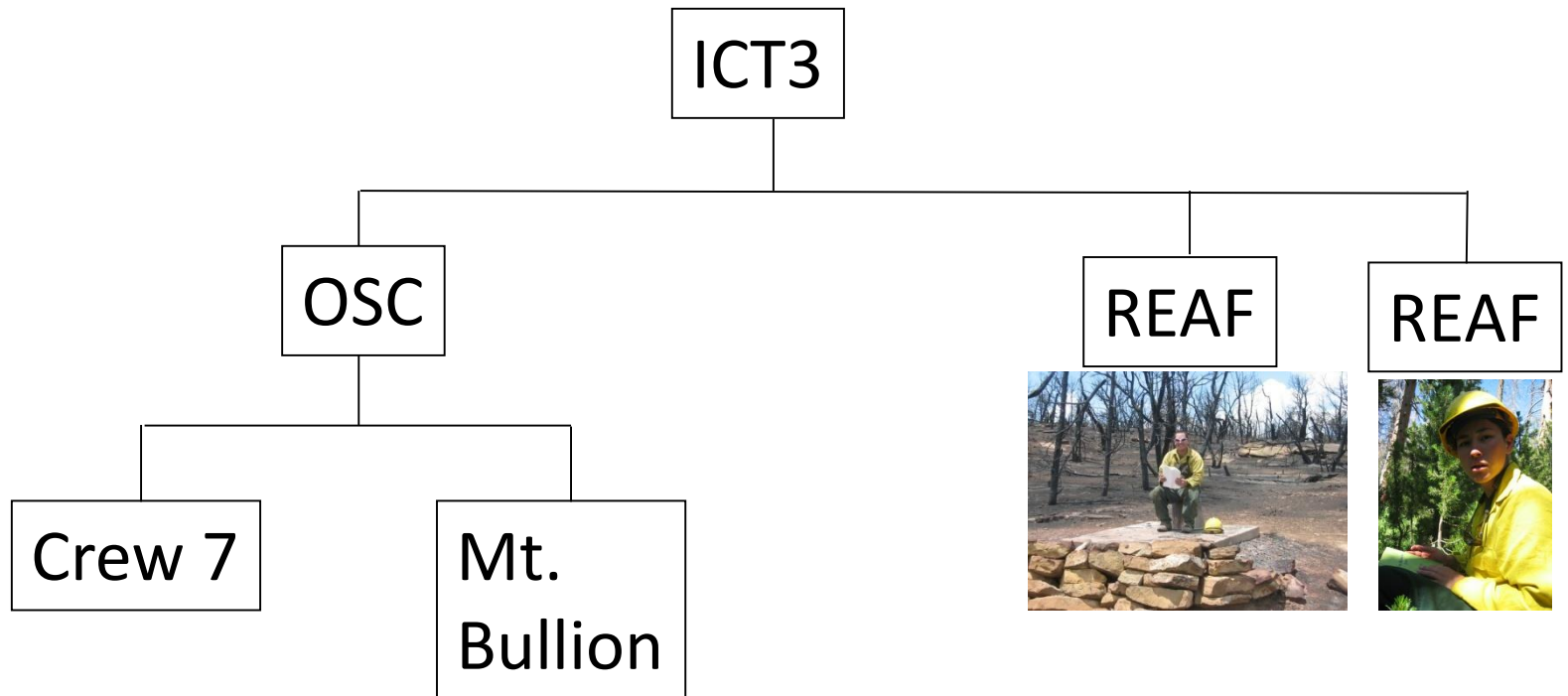
“Hey, thanks for coming out! We’re just not able to catch this thing- there’s lots of short pieces of line but don’t worry about trying to capture those. Our folks know that we’re not going to hold this thing tonight so they’re going light. Just look out for arch sites and grab a GPS point on them if you see anything. Here’s the map of nests- I’ve checked the ones I’ve been able to flag and get lined- anticipate the fire moving out in all directions and get more if you can. I’ve got Cedar coming tomorrow and we’ll get more help.” Be safe- work with Bernie as you move around.”



18. TAKING A NAP NEAR THE FIRELINE



# Grouse Fire ICS



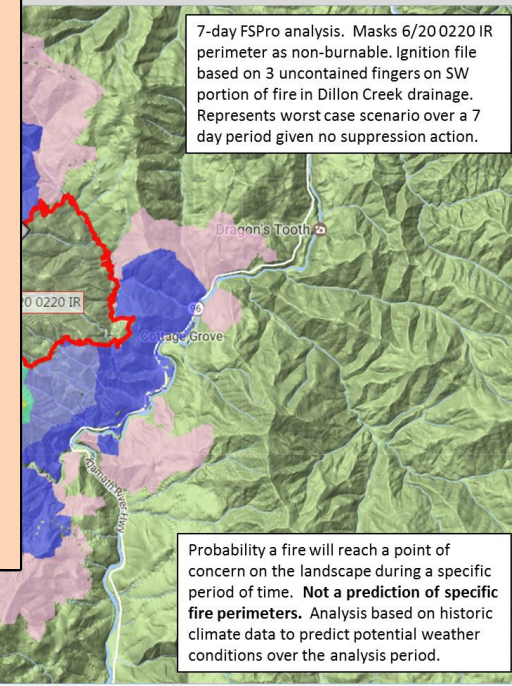
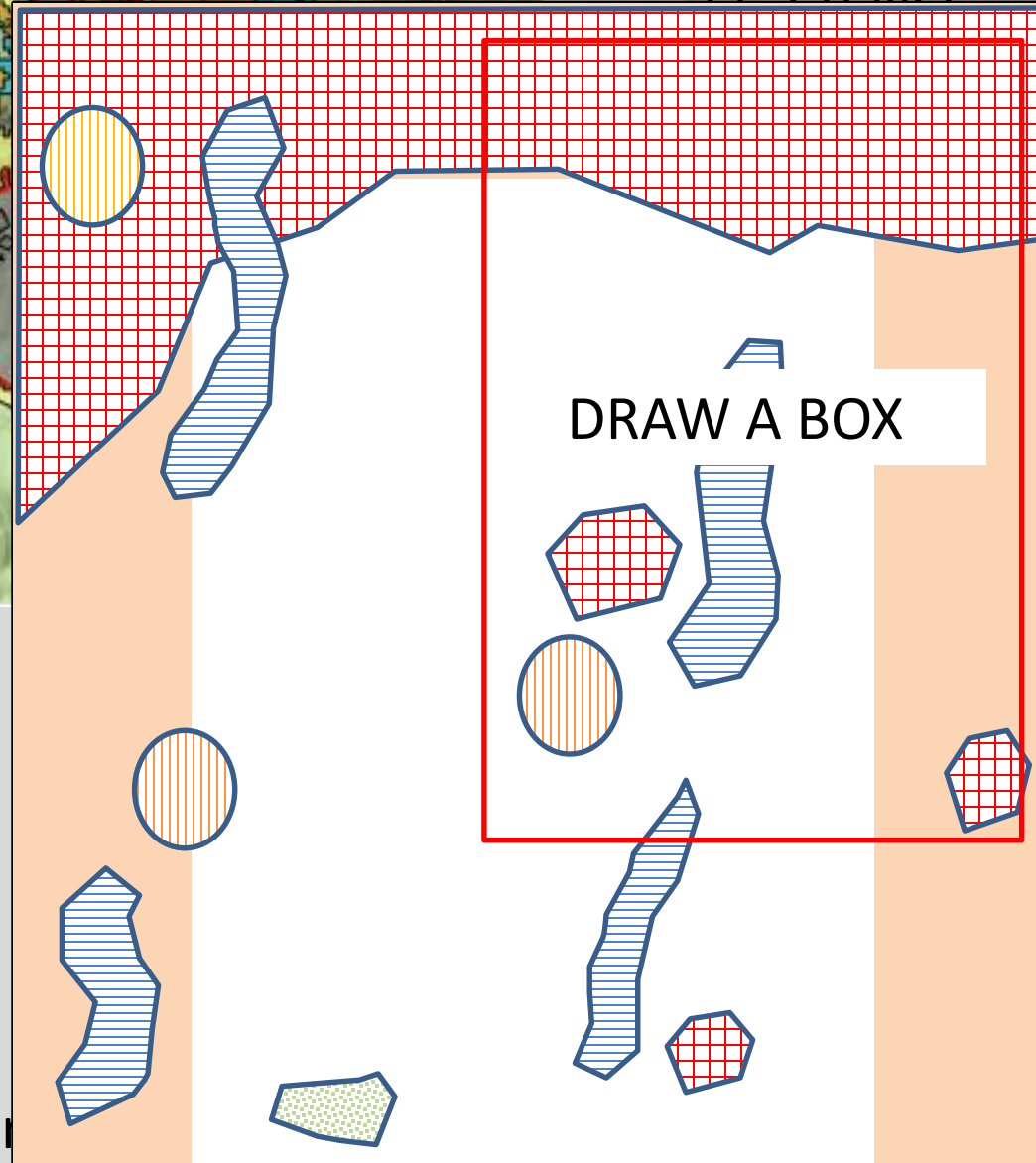
# Wildland Fire Decision Support System (WFDSS)



- A scalable online decision support tool that helps agency administrators and wildland fire managers make informed decisions for the management of wildfire response
- Key Components:
  - Extensive modelling applications
  - Decision documentation tools
  - **Pre-determined strategic objectives and management requirements applied spatially across the landscape**

# Near Term Fire Behavior

(1-7 days)



Fire Spread Probability  
(FSPPro)



# WFDSS for Resource Advisors

- Two areas of input...
  - Assessing pre-loaded resource information
    - strategic objectives
    - management requirements
  - Loading incident-level information
    - incident requirements
    - management action points (trigger points)

# Objectives and Requirements

- **Strategic Objectives**

- Broad statements about the desired future conditions of natural and cultural resources
  - derived from land and resource management plans

- **Management Requirements**

- Technical specifications for management activities and/or potential actions to help achieve strategic objectives

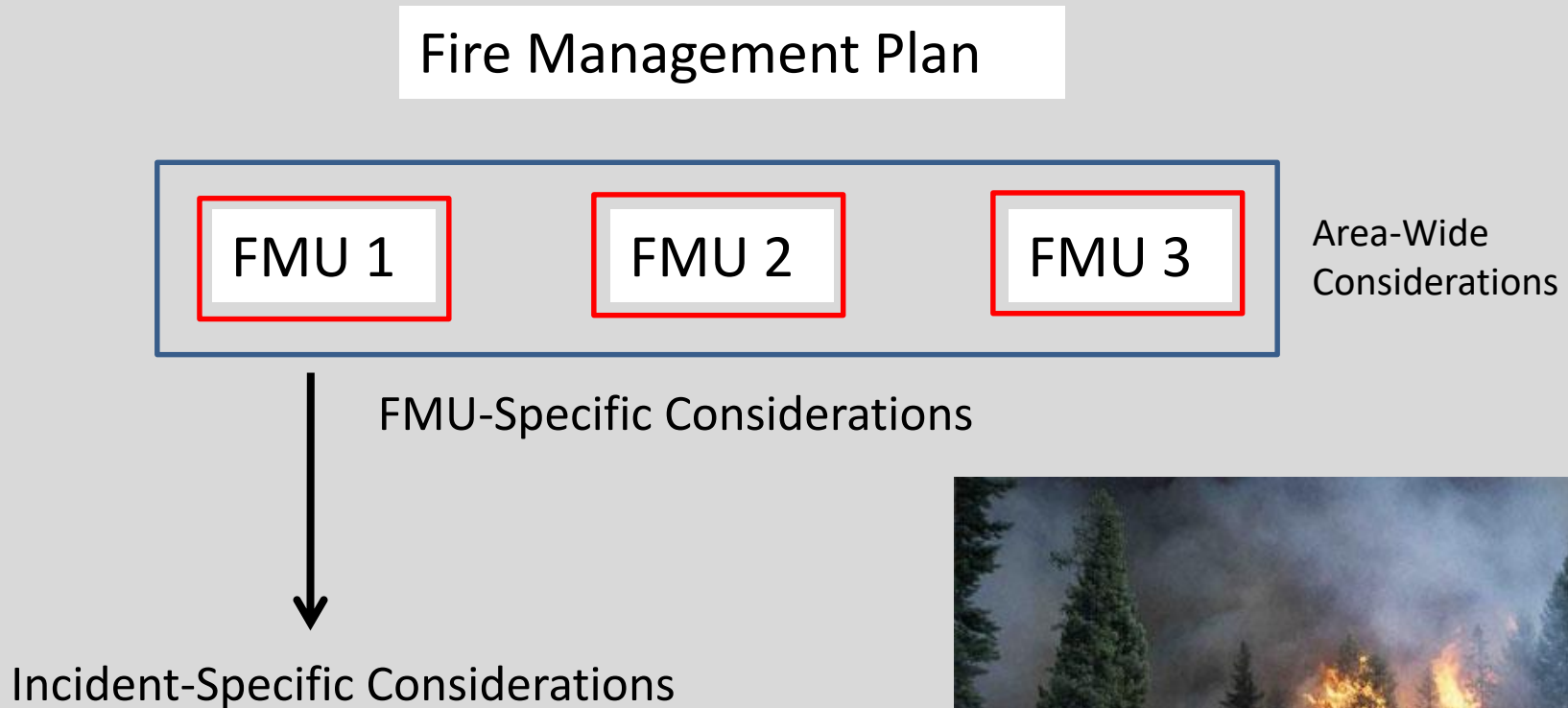
# Objectives and Requirements

- **Strategic Objective:** “Minimize operational impacts of fire management activities to desert tortoises”
- **Management Requirements:**
  - Assign READ to all wildfires in tortoise habitat
  - No off-road vehicle travel
  - Remove trash from all operational areas
  - No chemical retardant applications in tortoise habitat





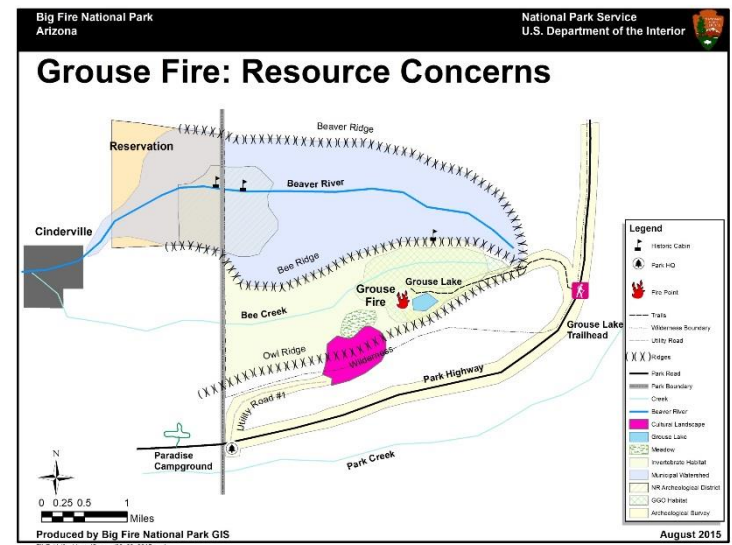
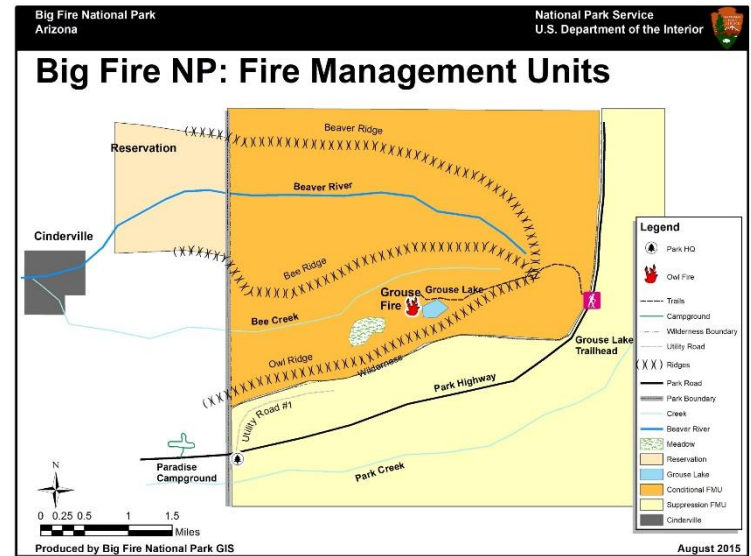
# Objectives and Requirements



# DAY 1, 2300: Grouse Fire WFDSS Inputs

## PRE-LOADED

- **General Strategic Objectives & Management Requirements**
  - Maximize use of wildland fire for resource benefits
  - Prevent degradation of natural and cultural resources due to wildland fire and fire management actions
  - Utilize MIST where appropriate
  - Assign READs for all incidents exceeding one operational period.

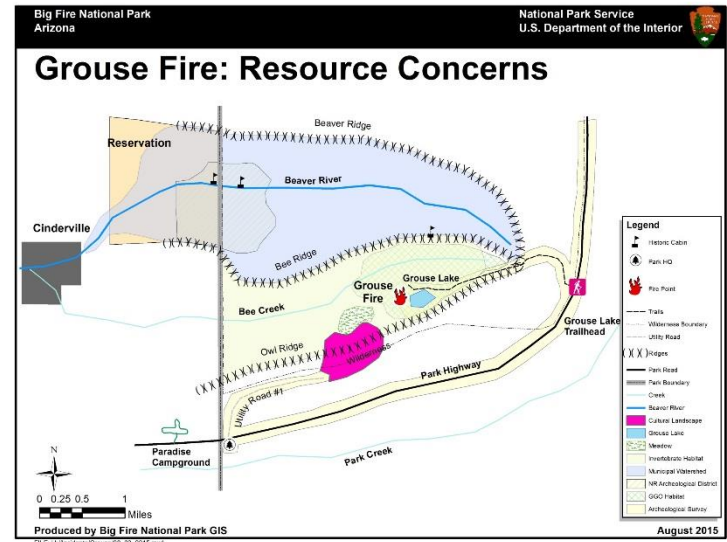
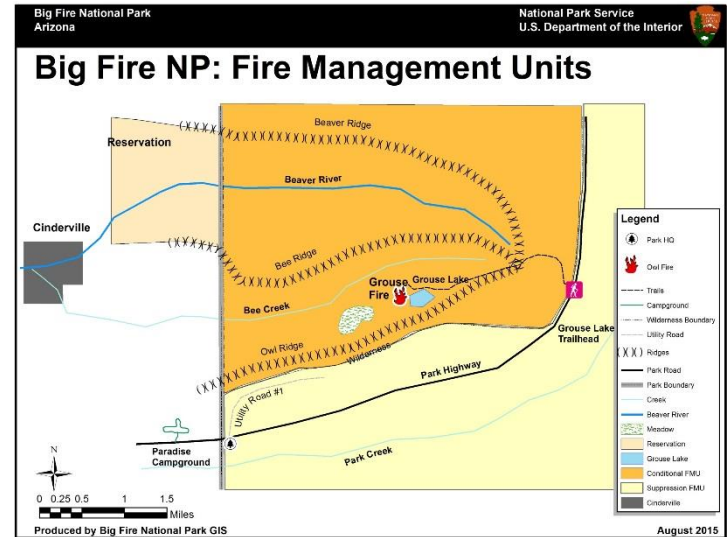


# DAY 1, 2300: Grouse Fire WFDSS

## Inputs CONT.

### PRE-LOADED

- **FMU-Specific Requirements:**
  - Maximize use of natural ignitions for resource benefits in the Conditional FMU
    - Bee Creek Invertebrates
    - Beaver River Water Quality
    - Owl Habitat
    - Cultural Resources
  - Aggressively suppress all unplanned ignitions in the WUI FMU, giving consideration to natural and cultural resources
    - Cultural Resources
    - Park Creek aquatic invasives

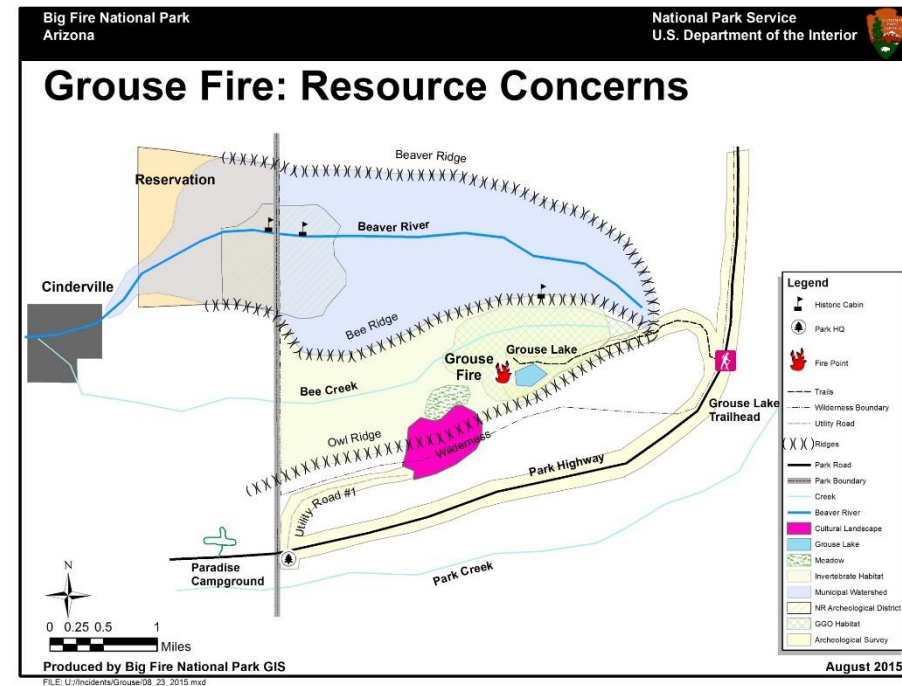




# DAY 1, 2400: Grouse Fire WFDSS Inputs

- **Incident-Specific Requirements**
  - Protect historic cabin on Bee Ridge using pre-assembled cabin protection kits.
  - Protect sensitive Bee Creek invertebrate habitat by avoiding chemical retardant drops, movement of water within and from outside watershed, etc.
  - Initiate best management practices to reduce the establishment and spread of noxious weeds
  - Avoid overflights and other audible and visual disturbances in proximity to great gray owl nesting sites and habitat in Bee Creek watershed

**READ-LOADED**

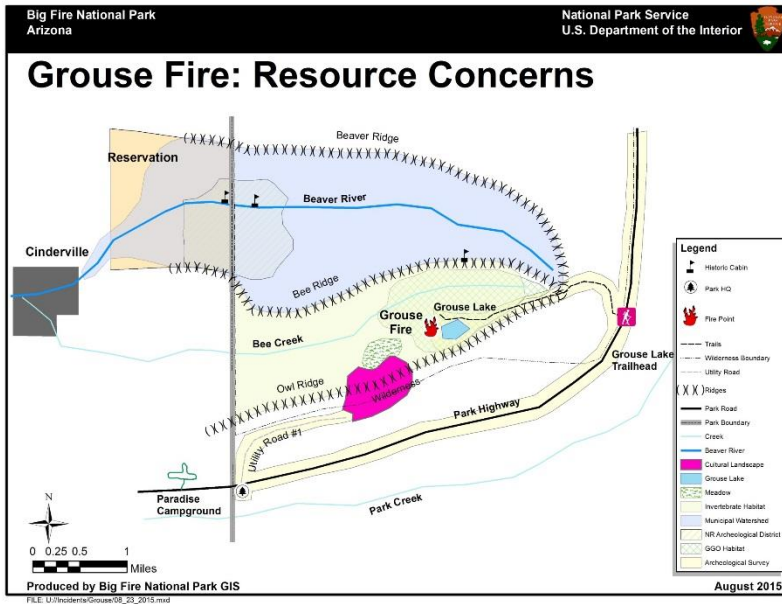


# DAY 1, 2400: Grouse Fire WFDSS

## Inputs CONT.

### PRE-LOADED

- **Incident-Specific Management Action Points**
  - Initiate Burned Area Emergency Response (BAER) assessment in the event of fire spread into the Beaver River watershed







# DAY 2, 0100: Pulling the Trigger

- Jun calls Cedar...let's order up the REAFs/READs
- Jun contacts park dispatch and provides names of resources and logistical information...Dispatch will place name requests through ROSS
  - Start contacting at 0600...needed at ICP later today
  - All will bring laptops, tablets and/or cell phones; vehicle rentals approved

# Delegation of Authority

“A formal document provided to the Incident Commander by the agency executive delegating authority and assigning responsibility. The delegation of authority can include objectives, priorities, expectations, constraints and other considerations or guidelines as needed.” NWCG



# Delegation of Authority

- Strategic objectives provided by the Agency Administrator to the IMT for the management of the incident (written and signed)
- Specific enough to convey expectations, broad enough to allow flexibility for contingencies

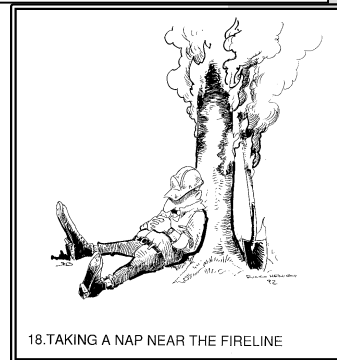


# Delegation of Authority cont.

- Jurisdictional and protection responsibility for the lands involved in the wildland fire, including responsibility for structural protection where relevant

- AREP who will represent line officer
- Suppression objectives and priority
- Specific suppression tactics or areas that require AREP/line officer approval
- READ who will represent the AREP/line officer

- Cost constraints and guidelines.
- Property accountability; fire loss/use rate expectations.
- Incident business advisor and required coordination with the team.
- Guidelines for media relations and incident information management.
- Procedures dealing with threats to other jurisdictions and private property.
- Any local logistical considerations, including procurement and supply procedures.
- Any other constraints or issues, such as current activities by forest or other agencies, legal requirements, training opportunities, etc.

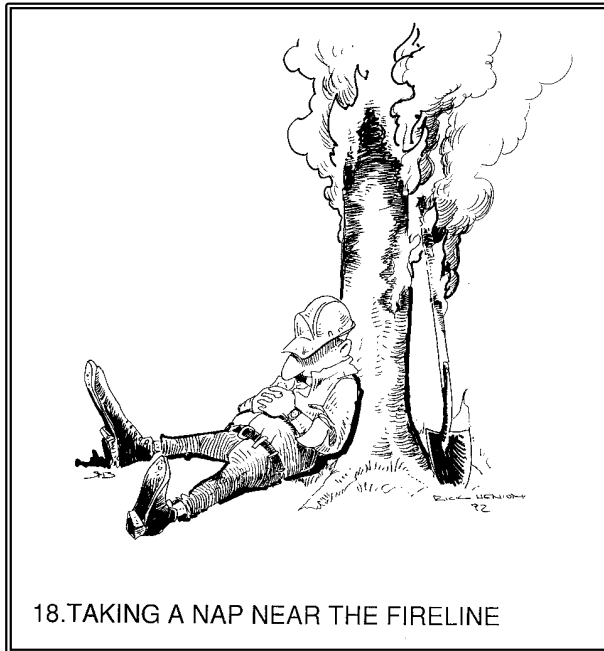


# DAY 2, 0300: Grouse Fire Delegation of Authority

- AREP and lead READ named
- Objectives:
  - Keep fire in the Bee Creek Drainage; away from wildland-urban interface to west and south, municipal watershed to north;
  - use MIST commensurate with wilderness values
- Tactics requiring approval
  - Retardant in Bee Creek drainage
  - Mechanized equipment in wilderness other than helicopters and chainsaws

# DAY 2, 0900

“Wake up Jun; the Team is here!”





# Incident Management Teams





# The Incident Command System & Incident Management Teams



# Large Fire Management

- *Type 2 Incident:* Most or all of the Command and General Staff positions are activated and filled by members of a standing Type 2 team.
  - Anticipate multiple operational periods
  - Written IAPs
  - Extensive logistical support
- *Type 1 Incident:* Same as above, but larger and more complex (>1,000 people)



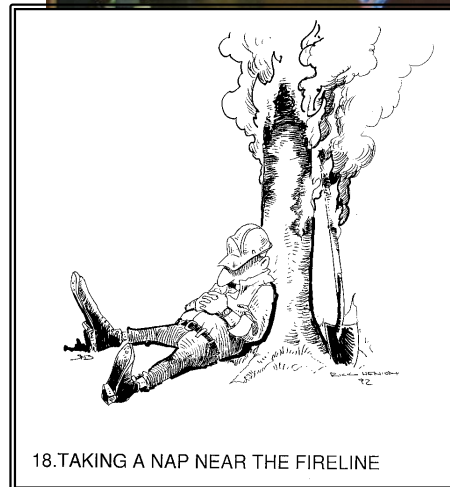
# Incident and Resource Typing

size, complexity, qualification, and capacity

	Wildfire Incidents	Crews	Helicopters	Wildland Engines
Metric	Size & Complexity	Experience & Qualifications	Max. Water Carrying Capacity	Tank Size & Pump Min. Flow Rates
Type 1	mega fires	Hotshots, Rappellers, Smoke Jumpers	700 gallons	-
Type 2	major fires	handcrews	300 gallons	-
Type 3	pretty big fires	-	100 gallons	500 gal.(150 gal/min)
Type 4	small fires	-	-	750 gal. (50 gal/min)
Type 5	single tree	-	-	400 gal. (50 gal/min)

# Day 2, 1000: Team Inbriefing

- The local unit presents a status of the fire, issues and concerns (in-depth presentation of the Delegation of Authority)
- Critical point for Line Officer to outline expectations with regard to use of READs/REAFs, BAER, etc.



18. TAKING A NAP NEAR THE FIRELINE

# Tracking Fires from Afar

## National Interagency Coordination Center Incident Management Situation Report Friday, December 13, 2019 – 0800 MT National Preparedness Level 1

### National Fire Activity (December 6 – December 12, 2019)

Initial attack activity: Light (233 new fires)  
New large incidents: 2  
Large fires contained: 6  
Uncontained large fires:\*\*\* 1  
Area Command teams committed: 0  
NIMOs committed: 0  
Type 1 IMTs committed: 0  
Type 2 IMTs committed: 0

Nationally, there is 0 large fire being managed under a strategy other than full suppression.  
\*\*\* Uncontained large fires include only fires being managed under a full suppression strategy.

[Link](#) to Geographic Area daily reports.

[Link](#) to Understanding the IMSR.

This report will post every Friday at 0800 Mountain Time unless significant activity occurs.

Twenty-one wildland fire personnel are assigned to support large fires in New South Wales, Australia.

### Active Incident Resource Summary

GACC	Incidents	Cumulative Acres	Crews	Engines	Helicopters	Total Personnel
AICC	1	14,907	0	0	1	5
NWCC	0	0	0	0	0	0
ONCC	0	0	0	0	0	0
OSCC	1	3,126	1	1	0	38
NRCC	0	0	0	0	0	0
GBCC	0	0	0	0	0	0
SWCC	0	0	0	0	0	0
RMCC	0	0	0	0	0	0
EACC	2	1,564	0	3	0	13
SACC	2	528	0	5	0	10
<b>Total</b>	<b>6</b>	<b>20,125</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>66</b>

### Southern California Area (PL 1)

New fires: 4  
New large incidents: 0  
Uncontained large fires: 1

**Cave**, Los Padres NF, USFS. Eight miles northwest of Santa Barbara, CA. Brush, chaparral and tall grass. Minimal fire behavior with smoldering.

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Cw	Eng	Heli			
Cave	CA-LPF	3,126	0	90	Ctn	UNK	38	-14	1	1	0	0	3.6M	FS

### Southern Area (PL 1)

New fires: 218  
New large incidents: 1  
Uncontained large fires: 0

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Cw	Eng	Heli			
* Morewood	OK-OKS	432	---	100	Ctn	---	4	---	0	2	0	0	14K	ST
Highway 50	OK-OKS	764	0	100	Ctn	---	4	0	0	2	0	1	16K	ST
Matthews	TX-TXS	950	450	100	Ctn	---	1	-28	0	0	0	0	NR	ST
One Horse	OK-ANA	426	-3	100	Ctn	---	1	-40	0	0	0	0	15K	BIA

OKS – Oklahoma DOF TXS – Texas A&M Forest Service ANA – Anadarko Agency, BIA

### Eastern Area (PL 1)

New fires: 4  
New large incidents: 0  
Uncontained large fires: 0

Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Cw	Eng	Heli			
Dry Hollow	WV-MOF	1,289	0	100	Ctn	---	3	-9	0	1	0	0	350K	FS

MOF – Monongahela NF, USFS

### Southwest Area (PL 1)

New fires: 1  
New large incidents: 1  
Uncontained large fires: 0

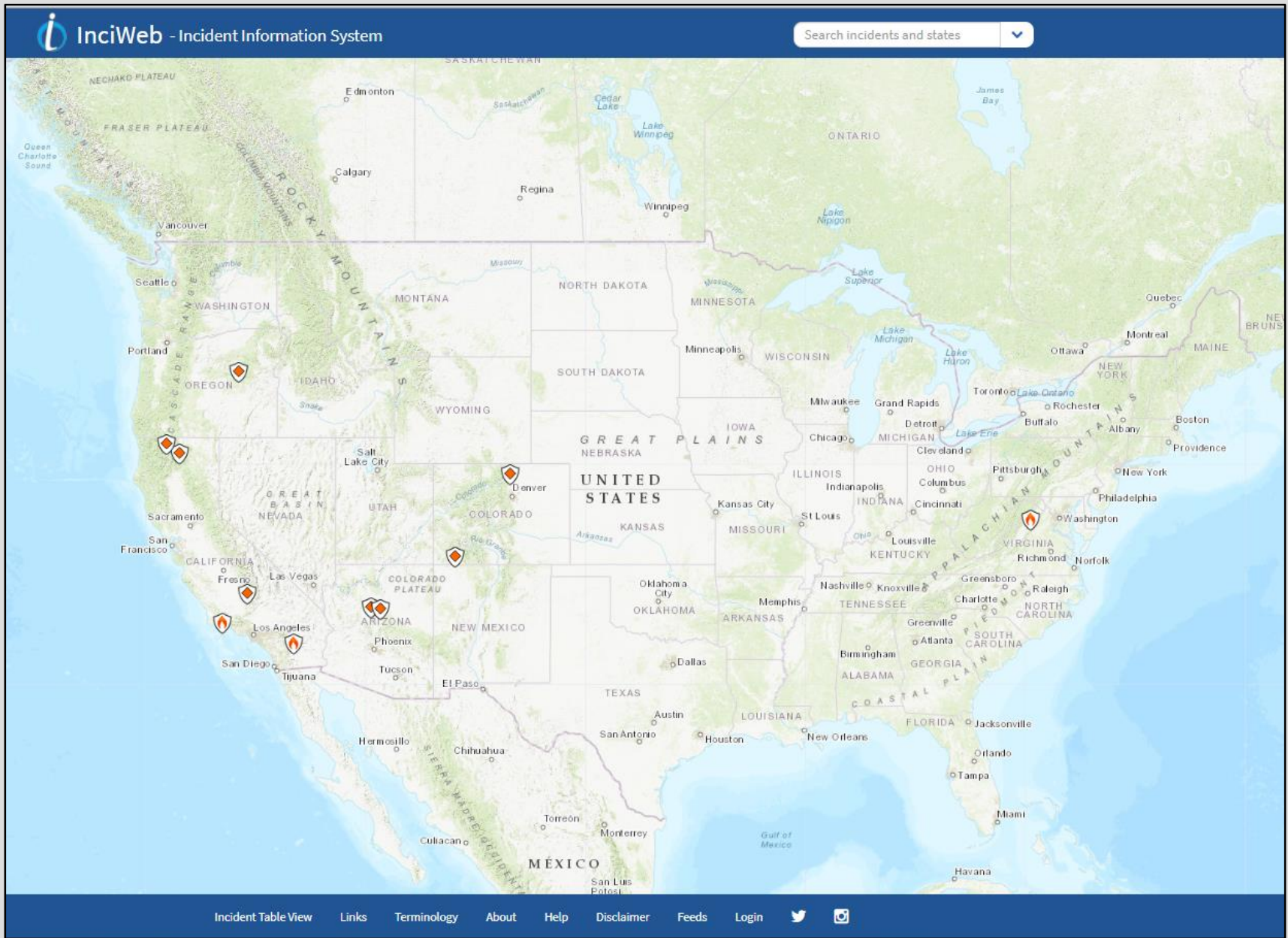
Incident Name	Unit	Size		%	Ctn/Comp	Est	Personnel		Resources			Strc Lost	\$\$ CTD	Origin Own
		Acres	Chge				Total	Chge	Cw	Eng	Heli			
* Aspen Butte	AZ-FTA	210	---	100	Ctn	---	0	---	0	0	0	0	150K	BIA

FTA – Fort Apache Agency, BIA

# National Interagency Coordination Center SIT REPORT



# INCIWEB



# INCIWEB


## Table of Incidents - Alternative Accessibility Friendly Map View


This table exists to help users with screen reading assistive technology or other accessibility needs work around the map based design and navigation of InciWeb. The table below contains all active incidents that are displayed on the map ordered by most recently updated. The table can be ordered in ascending or descending order by incident, type, state or size by clicking the column name. To filter the table by a word or phrase (ie. specific incident or state), enter the word in the search box above the table and press enter or click the search icon to apply the filter. Click on a hyperlinked incident name to view the detailed information page for that incident. On the incident overview page, there is an additional submenu to access the incident's announcements, closures, news, maps, and photographs.







Incident	Type	State	Size	Updated
<a href="#">Kern River Ranger District Prescribed RX</a>	Prescribed Fire	California, USA	0 Acres	12 hrs. ago
<a href="#">Klamath NF Fall RX Burning</a>	Prescribed Fire	California, USA	0 Acres	13 hrs. ago
<a href="#">Slash Pile Burning 2019-2020</a>	Prescribed Fire	Colorado, USA	0 Acres	2 days ago
<a href="#">Shasta-Trinity Prescribed Fires 2019-20</a>	Prescribed Fire	California, USA	0 Acres	2 days ago
<a href="#">Cave Fire</a>	Wildfire	California, USA	3126 Acres	2 days ago
<a href="#">2019 Fall &amp; Rx Burns for Flagstaff Dist.</a>	Prescribed Fire	Arizona, USA	0 Acres	3 days ago
<a href="#">San Juan NF Prescribed Fire Program</a>	Prescribed Fire	Colorado, USA	0 Acres	12/11/2019
<a href="#">Martinez 3 Fire</a>	Wildfire	California, USA	52 Acres	12/10/2019
<a href="#">Kaibab NF South Zone Rx Fire</a>	Prescribed Fire	Arizona, USA	300 Acres	12/3/2019
<a href="#">Kennedy Peak Fire</a>	Wildfire	Virginia, USA	745 Acres	11/26/2019
<a href="#">2019 Malheur NF Prescribed Fire</a>	Prescribed Fire	Oregon, USA	0 Acres	11/13/2019

# INCIWEB

 **InciWeb** - Incident Information System




## Walker Fire



### Unit Information

Plumas National Forest  
U.S. Forest Service  
159 Lawrence Street  
Quincy, CA 95971



[Information](#) [Announcements](#) [Closures](#) [News](#) [Photographs](#) [Videos](#) [Maps](#)

This incident is no longer being updated.

### Incident Overview

Suppression repair work continues. To date, fire crews and equipment have accomplished:

61% of the 75 miles of dozer line - More than 61% of the 72 miles of road repair - 100% of the 14 miles of handline

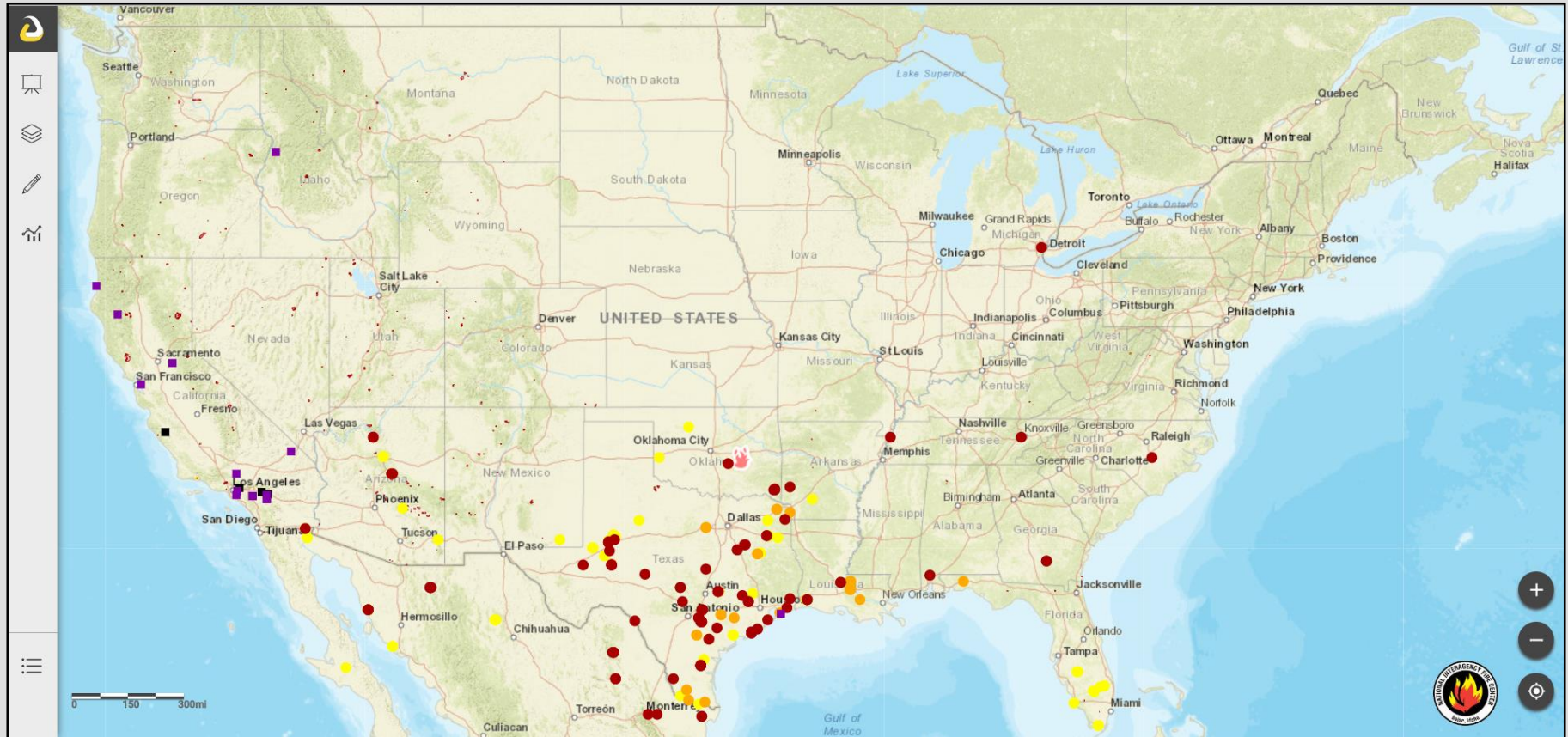
Out of concern for public safety, roads and trails within the fire area are closed.

**Forest Closure:** The Forest Closure Order for portions of the Mt. Hough and Beckwourth Ranger Districts on the Plumas National Forest is in effect (Order 05-11-00-19-13). Please see Inciweb (closures tab) for closure information and a map of the closure area surrounding the Walker Fire.

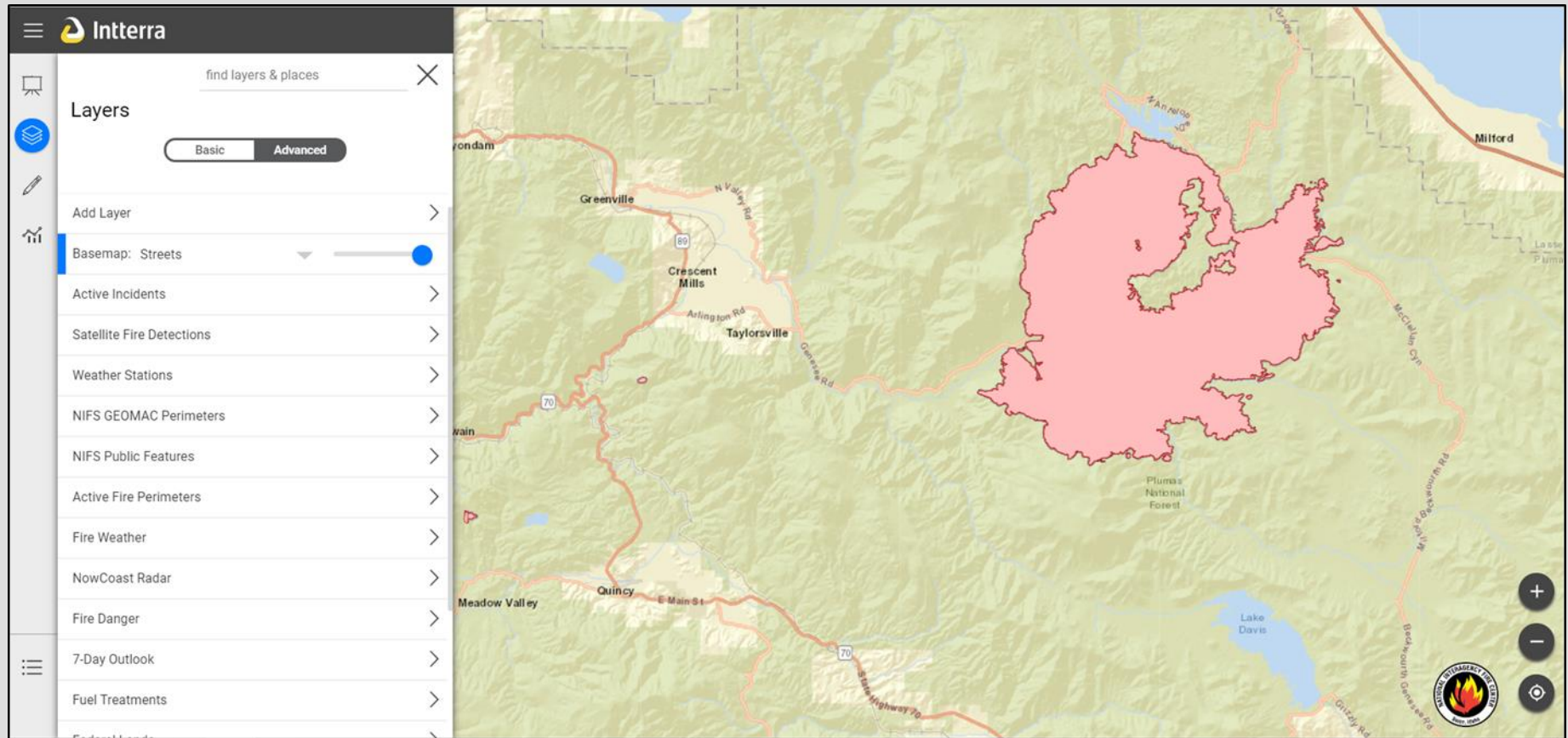
A new update will be provided as needed at significant junctures.



# NIFC NATIONAL FIRE SITUATION MAP



# NIFC NATIONAL FIRE SITUATION MAP



# NIFC FTP SERVER

## NIFC FTP Server Information

Welcome to the **NIFC FTP Server**, an official site for interagency wildland fire incident data and documents.

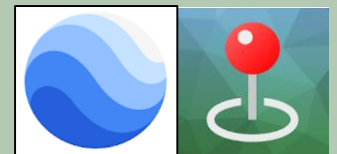
This ftp service is intended for **short-term interagency sharing**, not as a file archive or records repository, or much that carries over from season to season.

Many people have access to shared folders, so please retain copies of anything you post.

**Data backups are not performed on the NIFC FTP Server.**

### Public Access Folders:


















- Incident Specific Data
- Basic Information
- CTSP Information
- NIROPS Information
- Predictive Services Information
- National BAER Information





# NIFC FTP Server

## Index of /public/incident\_specific\_data

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">Fuels/</a>	2019-11-05 16:43	-	
 <a href="#">IAP 0809.pdf</a>	2019-08-09 09:04	4.1M	
 <a href="#">alaska/</a>	2019-09-02 17:49	-	
 <a href="#">calif_n/</a>	2019-04-18 17:09	-	
 <a href="#">can_n_save/</a>	2018-08-18 09:23	-	
 <a href="#">calif_s/</a>	2019-09-09 10:15	-	
 <a href="#">california_statewide/</a>	2019-07-02 13:12	-	
 <a href="#">eastern/</a>	2019-01-02 14:36	-	
 <a href="#">great_basin/</a>	2019-08-27 08:06	-	
 <a href="#">n_rockies/</a>	2019-05-08 21:58	-	
 <a href="#">nw_pio_map_products/</a>	2017-09-16 09:41	-	
 <a href="#">pacific_nw/</a>	2019-07-11 16:45	-	
 <a href="#">rocky_mtn/</a>	2018-12-20 11:44	-	
 <a href="#">southern/</a>	2018-07-20 13:23	-	
 <a href="#">southwest/</a>	2018-11-13 12:16	-	
 <a href="#">training/</a>	2019-06-04 15:51	-	




















# NIFC FTP Server

## Index of /public/incident\_specific\_data/calif\_n

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">!2019_FEDERAL_Incidents/</a>	2019-10-11 10:35	-	
 <a href="#">!CALFIRE/</a>	2019-05-21 11:36	-	
 <a href="#">2012 FEDERAL Incidents/</a>	2015-06-10 00:10	-	
 <a href="#">2012 Incident Aviation/</a>	2015-06-10 00:16	-	
 <a href="#">2013 FEDERAL Incidents/</a>	2018-09-10 09:56	-	
 <a href="#">2014 FEDERAL Incidents/</a>	2015-12-02 11:00	-	
 <a href="#">2015 FEDERAL Incidents/</a>	2018-07-10 22:45	-	
 <a href="#">2016 FEDERAL Incidents/</a>	2016-09-27 09:51	-	
 <a href="#">2017 FEDERAL Incidents/</a>	2018-03-02 13:03	-	
 <a href="#">2018 FEDERAL Incidents/</a>	2019-09-09 22:07	-	

# NIFC FTP Server



## Index of /public/incident\_specific\_data/calif\_n

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">CA-ENF-030945_Caples/</a>	2019-09-06 14:35	-	
 <a href="#">CA-KNF-004596_Lumgreys/</a>	2019-07-29 08:41	-	
 <a href="#">CA-KNF-005781_Tree/</a>	2019-07-29 13:05	-	
 <a href="#">CA-KNF-007074_Lime/</a>	2019-05-17 16:13	-	
 <a href="#">CA-KNF-007099_Kidder2/</a>	2019-05-17 16:24	-	
 <a href="#">CA-LNP-4540_Red/</a>	2019-09-14 22:23	-	
 <a href="#">CA-MDF-000509_Tucker/</a>	2019-05-17 16:10	-	
 <a href="#">CA-MDF-000836_Lone/</a>	2019-05-17 16:22	-	
 <a href="#">CA-MNF-000241_East/</a>	2018-04-18 10:02	-	
 <a href="#">CA-MNF-000485_Henthorne/</a>	2019-05-17 16:23	-	
 <a href="#">CA-NOD-004382_W-1/</a>	2019-05-17 16:11	-	
 <a href="#">CA-NOD-004869_R-1_Ranch/</a>	2019-08-08 20:55	-	
 <a href="#">CA-PNF-001324_Walker/</a>	2019-10-03 22:51	-	
 <a href="#">CA-SHF-000017_Cutthroat_Middle_Ramshorn/</a>	2019-09-12 15:39	-	
 <a href="#">CA-SHF-001209_South/</a>	2019-09-06 19:53	-	
 <a href="#">CA-xxx-xxx_incident name0010/</a>	2019-09-06 14:35	-	
 <a href="#">CA-xxx-xxx_incident name0011/</a>	2019-10-11 10:31	-	
 <a href="#">CA-xxx-xxx_incident name0012/</a>	2019-10-11 10:32	-	
 <a href="#">CA-xxx-xxx_incident name0013/</a>	2019-10-11 10:36	-	






# NIFC FTP Server

## Index of /public/incident\_specific

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">Complexity_Analysis/</a>	2019-08-29 20:24	-	
 <a href="#">Delegation of Authority/</a>	2019-08-29 20:24	-	
 <a href="#">Demob Plan/</a>	2019-08-29 20:24	-	
 <a href="#">Final Incident Narrative/</a>	2019-08-29 20:24	-	
 <a href="#">GIS/</a>	2019-08-29 20:24	-	
 <a href="#">IR/</a>	2019-10-03 22:51	-	





















# NIFC FTP Server

## Index of /public/incident\_specific\_data

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#"><u>Parent Directory</u></a>		-	
 <a href="#"><u>IncidentData/</u></a>	2019-10-04 00:36	-	
 <a href="#"><u>Products/</u></a>	2019-10-10 12:16	-	

# NIFC FTP Server

## Index of /public/incident\_specific\_data/calif\_n/!2019\_FEDERAL\_001324\_Walker/GIS/Products

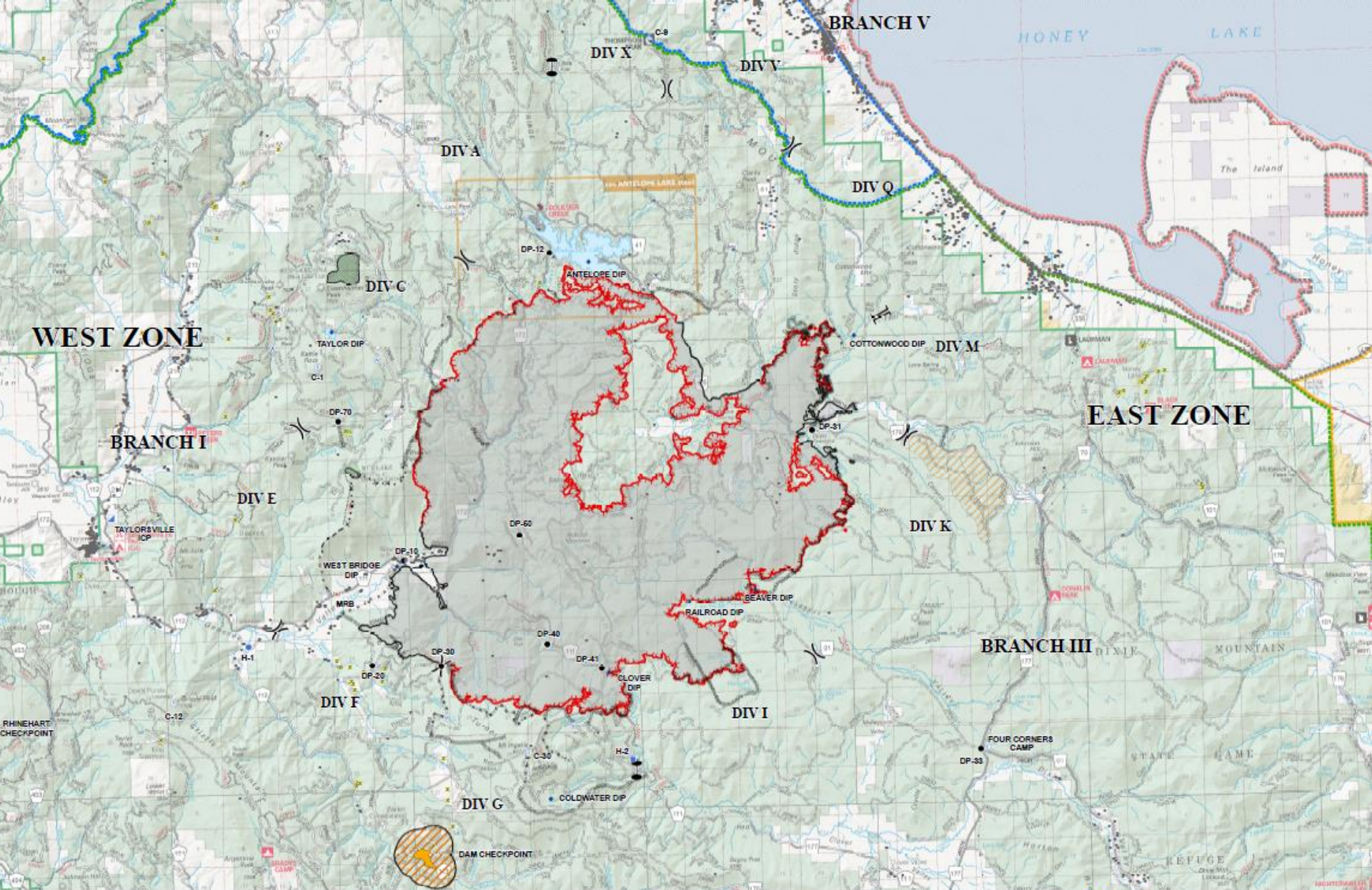
<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">20190906/</a>	2019-09-06 13:11	-	
 <a href="#">20190907/</a>	2019-09-07 04:48	-	
 <a href="#">20190908/</a>	2019-09-08 03:35	-	
 <a href="#">20190909/</a>	2019-09-10 06:19	-	
 <a href="#">20190910/</a>	2019-09-10 08:32	-	
 <a href="#">20190911/</a>	2019-09-11 08:18	-	
 <a href="#">20190912/</a>	2019-09-12 13:35	-	
 <a href="#">20190913/</a>	2019-09-13 13:32	-	
 <a href="#">20190914/</a>	2019-09-14 06:29	-	
 <a href="#">20190915/</a>	2019-09-16 02:45	-	
 <a href="#">20190916/</a>	2019-09-17 08:08	-	
 <a href="#">20190917/</a>	2019-09-17 08:10	-	
 <a href="#">20190918/</a>	2019-09-19 08:08	-	
 <a href="#">20190919/</a>	2019-09-19 08:09	-	
 <a href="#">20190920/</a>	2019-09-20 08:41	-	
 <a href="#">20190921/</a>	2019-09-21 03:43	-	
 <a href="#">20190922/</a>	2019-09-22 02:02	-	
 <a href="#">20190923/</a>	2019-09-23 01:43	-	
 <a href="#">20190924/</a>	2019-09-24 01:39	-	



# NIFC FTP Server

## Index of /public/incident\_specific\_data/calif\_n/!2019\_FEDERAL\_001324\_Walker/GIS/Products/20190913

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">Airops_archE_port_2019_Walker_CAPNF001324_.pdf</a>	2019-09-13 03:37	23M	
 <a href="#">Airops_archE_port_20190913_0900_Walker_CAPNF001324_.pdf</a>	2019-09-13 11:09	4.9M	
 <a href="#">BAM_36x36_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:33	17M	
 <a href="#">FireHistory_E_land_2019_Walker-CA-PNF-001324.pdf</a>	2019-09-13 04:23	816K	
 <a href="#">IAP_11x17_land_Combined_20190913_Walker_CAPNF001324.pdf</a>	2019-09-13 03:48	15M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER.tif</a>	2019-09-13 13:57	65M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 06:19	11M	
 <a href="#">OPS_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 08:40	28M	
 <a href="#">PIO_C_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 09:45	9.0M	
 <a href="#">Transportation_11x17_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:55	653K	
 <a href="#">Transportation_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 04:12	20M	
 <a href="#">Walker_Polygon_20190913.kmz</a>	2019-09-13 13:32	95K	
 <a href="#">airops_pilot_11X17_land_20190913_0941_Walker_CAPNF001324_1_AltHillshade.pdf</a>	2019-09-13 11:43	1.0M	



# Operations

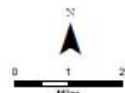
Walker Fire

CA-PNF-001324

09/13/2019 0700



Known Mine Hazards (Abandoned Mines)	Helipad	Other	Completed Dozer Line	Road as Completed Line	Evolution Zone	CAL FIRE
Structure	Incident Command Post	Zone Break	Uncontrolled Fire Edge	Access or Improved Road	Walker Mine Superfund	Department of Defense
Camp	Repairer	Division Break	Completed Line	Proposed Dozer Line	Avoidance Area	Local
Dip Site	Reluctant/Mud Pit	Branch Break	Completed Hand Line	Planned Fire Line	Bureau of Land Management	USDA/Forest Service
Drop Point	Water Source					



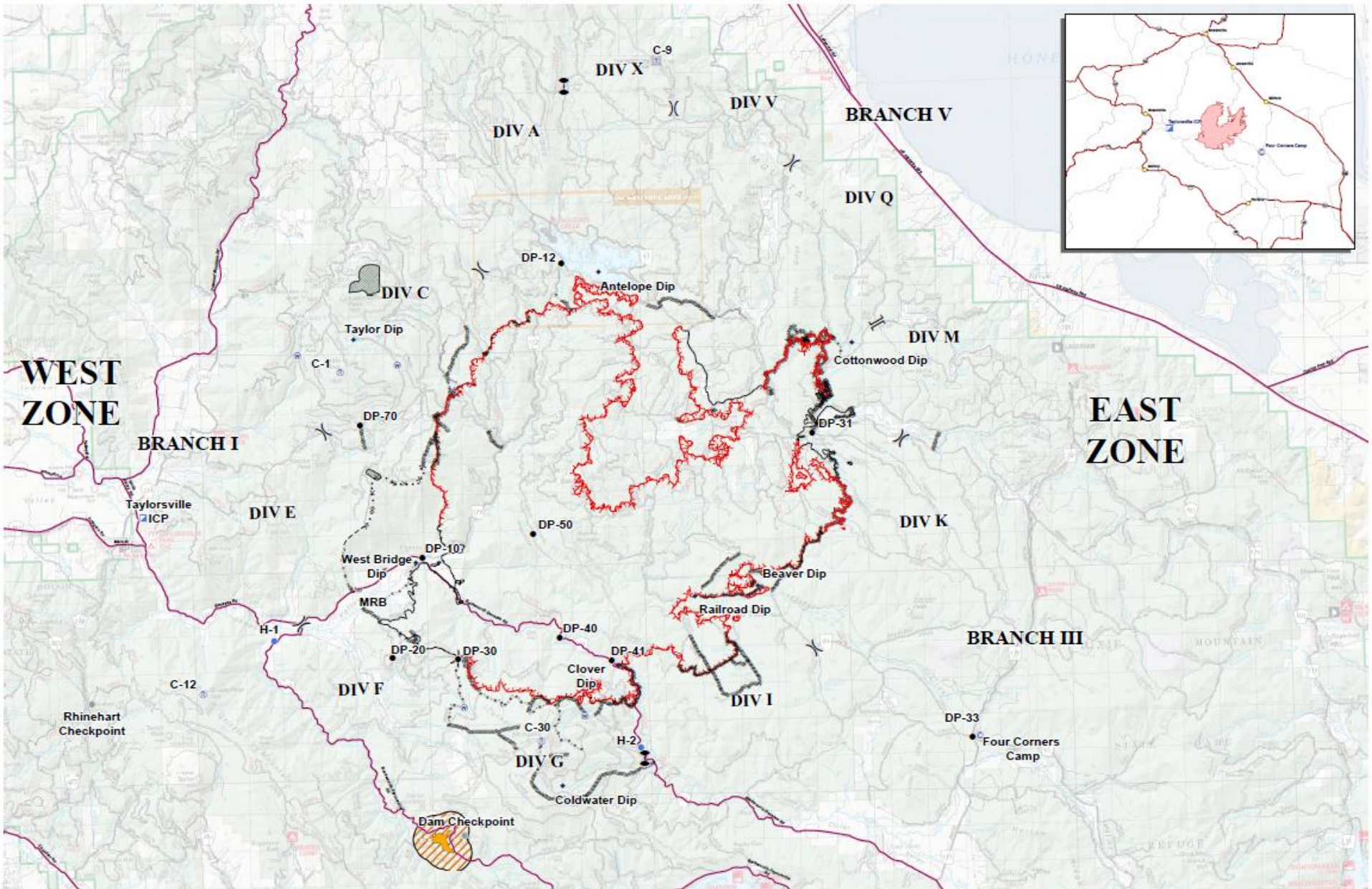


# NIFC FTP Server

## Index of /public/incident\_specific\_data/calif\_n/!2019\_FEDERAL/001324\_Walker/GIS/Products/20190913

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>		-	
 <a href="#">Airops_archE_port_2019_Walker_CAPNF001324_.pdf</a>	2019-09-13 03:37	23M	
 <a href="#">Airops_archE_port_20190913_0900_Walker_CAPNF001324_.pdf</a>	2019-09-13 11:09	4.9M	
 <a href="#">BAM_36x36_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:33	17M	
 <a href="#">FireHistory_E_land_2019_Walker-CA-PNF-001324.pdf</a>	2019-09-13 04:23	816K	
 <a href="#">IAP_11x17_land_Combined_20190913_Walker_CAPNF001324.pdf</a>	2019-09-13 03:48	15M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER.tif</a>	2019-09-13 13:57	65M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 06:19	11M	
 <a href="#">OPS_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 08:40	28M	
 <a href="#">PIO_C_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 09:45	9.0M	
 <a href="#">Transportation_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:55	653K	
 <a href="#">Transportation_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 04:12	20M	
 <a href="#">Walker_Polygon_20190913_1</a>	2019-09-13 13:32	95K	
 <a href="#">airops_pilot_11X17_land_20190913_0941_Walker_CAPNF001324_1_AltHillshade.pdf</a>	2019-09-13 11:43	1.0M	

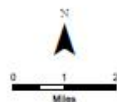




## Transportation

Walker Fire  
CA-PNF-001324  
09/13/2019



# NIFC FTP Server

## Index of /public/incident\_specific\_data/calif\_n/!2019\_FEDERAL/001324\_Walker/GIS/Products/20190913

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>	-	-	-
 <a href="#">Airops_archE_port_2019_Walker_CAPNF001324_.pdf</a>	2019-09-13 03:37	23M	
 <a href="#">Airops_archE_port_20190913_0900_Walker_CAPNF001324_.pdf</a>	2019-09-13 11:09	4.9M	
 <a href="#">BAM_36x36_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:33	17M	
 <a href="#">FireHistory_E_land_2019_Walker-CA-PNF-001324.pdf</a>	2019-09-13 04:23	816K	
 <a href="#">IAP_11x17_land_Combined_20190913_Walker_CAPNF001324.pdf</a>	2019-09-13 03:48	15M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 13:57	65M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 06:19	11M	
 <a href="#">OPS_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 08:40	28M	
 <a href="#">PIO_C_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 09:45	9.0M	
 <a href="#">Transportation_11x17_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:55	653K	
 <a href="#">Transportation_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 04:12	20M	
 <a href="#">Walker_Polygon_20190913.kmz</a>	2019-09-13 13:32	95K	
 <a href="#">airops_pilot_11X17_land_20190913_0941_Walker_CAPNF001324_1_AltHillshade.pdf</a>	2019-09-13 11:43	1.0M	







# NIFC FTP Server

## Index of /public/incident\_specific\_data/calif\_n/!2019\_FEDERAL\_001324\_Walker/GIS/Products/20190913

<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 <a href="#">Parent Directory</a>	-	-	-
 <a href="#">Airops_archE_port_2019_Walker_CAPNF001324_.pdf</a>	2019-09-13 03:37	23M	
 <a href="#">Airops_archE_port_20190913_0900_Walker_CAPNF001324_.pdf</a>	2019-09-13 11:09	4.9M	
 <a href="#">BAM_36x36_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:33	17M	
 <a href="#">FireHistory_E_land_2019_Walker-CA-PNF-001324.pdf</a>	2019-09-13 04:23	816K	
 <a href="#">IAP_11x17_land_Combined_20190913_Walker_CAPNF001324.pdf</a>	2019-09-13 03:48	15M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER.tif</a>	2019-09-13 13:57	65M	
 <a href="#">OPS_IR_archE_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 06:19	11M	
 <a href="#">OPS_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 08:40	28M	
 <a href="#">PIO_C_land_20190913_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 09:45	9.0M	
 <a href="#">Transportation_11x17_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 03:55	653K	
 <a href="#">Transportation_archE_land_2019_WALKER_CA-PNF-001324.pdf</a>	2019-09-13 04:12	20M	
 <a href="#">Walker_Polygon_20190913.kmz</a>	2019-09-13 13:32	95K	
 <a href="#">airops_pilot_11x17_land_20190913_0941_Walker_CAPNF001324_1_AltHillshade.pdf</a>	2019-09-13 11:43	1.0M	

- Heat Perimeter
- 5/24/2019 18:00
- Scattered Heat
- Isolated Heat



Timeline controls with a play button, a progress bar, and a timestamp of 00:00. Below the timeline is a small icon of a person with the text "INFRARED OPERATIONS".

Image Landsat / Copernicus  
© 2018 Google  
Data LDEO, Columbia, NSF, NOAA

Google Earth







# Fire Gear

Wildland Firefighter Personal Protective Equipment (PPE)



# Personal Gear

fire t-shirts  
underwear  
socks  
fire pants  
belt  
sunglasses  
fire boots  
down jacket  
sweatshirt  
ball cap  
toiletry kit  
eyeglasses &  
contacts  
earplugs  
Bandannas  
flashlight  
flip flops  
towel  
book  
coffee mug

pillow  
sleeping bag  
sleeping pad  
tent  
nametag  
business cards  
chapstick  
sunscreen  
non-fire clothes



# READ Gear

Resource Order  
Red Card  
laptop computer  
PIV card  
passwords  
tablet computer  
phone  
charging cables  
cigarette lighter  
USB ports

WiFi Hotspot  
Ethernet cable  
thumb drive  
digital READ resources  
camera with batteries &  
charger  
portable radio  
clamshell  
IRPG  
GPS unit and cable  
binos  
notebook  
pens and pencils  
Sharpee markers  
CTR book  
READ contact list  
compass  
watch  
knife  
cash



**WHEN YOU REALIZE YOU**

**DIDN'T PACK 14 DAYS-  
WORTH OF UNDERWEAR**



# Travelling to the Incident



## Interagency Incident Driving Policy 2019 Red Book

- 10 hours “behind the wheel” per duty day
- 16 hours of driving per day if multiple drivers
- Driver needs 8 consecutive hours of rest before beginning shift...typically 2200 -0600
- 2:1 work/rest ratio required

# National Emergency Response Vehicles (NERV)

- Requested through local dispatch center
- NERV should be authorized on resource orders
- Transferrable between assignments and individuals (up to 120 days)
- May be driven anywhere within the US and Canada and dropped off at any Enterprise location
- Renters should NOT ever be asked to give a credit card for a NERV rental...covered by incident finance account (P-Code)
- ½ ton pickup (min.) if driving off paved roads
- Applies to NPS, USFS, BLM, FWS...

**NEW in 2019 !!!**



## DAY 2, 1100: Cedar Arrives at the Fire...





“Man, am I glad to see you!”





# Incident Command Post (ICP)



# ICPs

- Frequently established outside of land management units...schools, campgrounds, fairgrounds, ranches
- Good for reducing some impacts...noise, traffic, ground disturbance
- But can result in resource concerns...





# DAY 2, 1115: Grouse Fire ICP...Weeds



Vehicles



Supplies

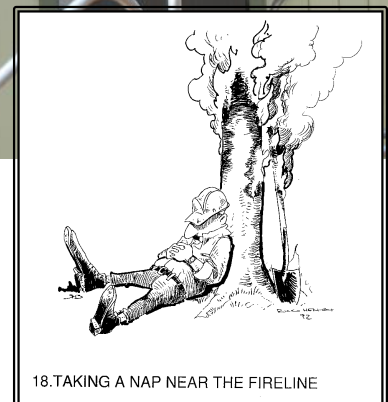
People





# DAY 2, 1120: Check-In

Proceed to check-in...get Jun an "O-Number"



18. TAKING A NAP NEAR THE FIRELINE

# DAY 2, 1130: Cedar briefing from Jun

- Status to date...
- Copy of Delegation of Authority, WFDSS outputs
- Copies of park READ Guide and digital data

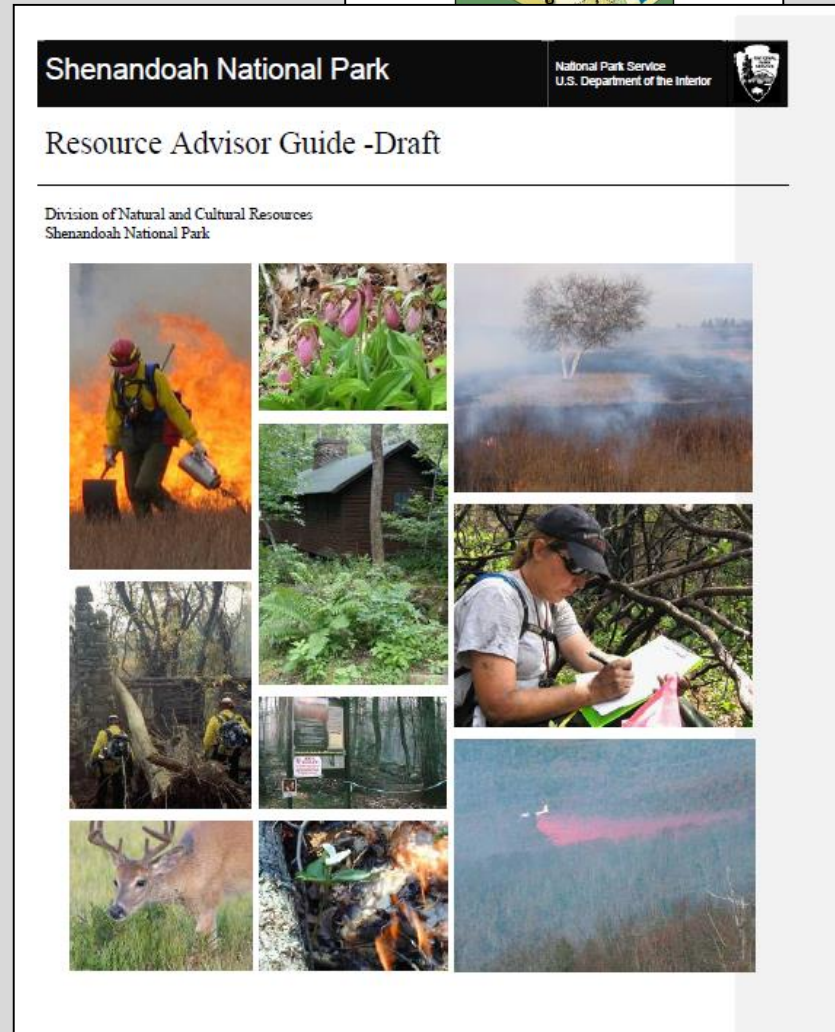
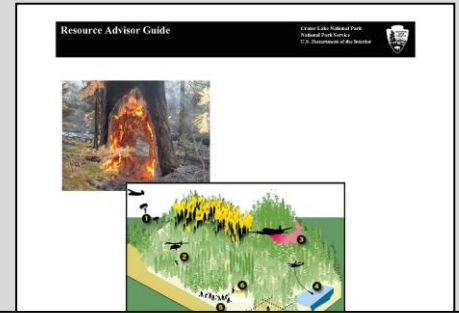




# READ Guides

Distill resource-related issues from FMP into a condensed, easily-used document

- Fire regimes
- Standard approaches for fire management activities
- Resource-specific issues for fire management activities
- Maps
- Sensitive species lists
- Forms





# DESERT TORTOISE & WILDLAND FIRE

## DESERT TORTOISES ARE PROTECTED

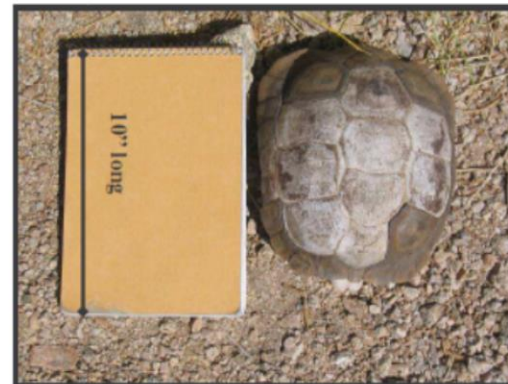
- Desert tortoises (*Gopherus agassizii*) are listed under the Endangered Species Act as a “threatened species”.
- They are protected against any form of “take” - “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.”

## TORTOISE FACTS

- They occur throughout the Mojave Desert. The best habitats are at elevations below 3500’ but tortoises can be and have been found outside of that range (park biologists have observed several above 4400’).
- Tortoises are slow growing creatures that range from the size of a silver dollar when they hatch to over 12” long later on in life. They have been known to live about 80 years in the wild.



*This tortoise is approximately 1 year old.*



*This tortoise (est. 50 yrs) died a while before this photo was taken. Due to exposure to the elements some of the scutes have come off, revealing the bone shell underneath.*

- Desert tortoises are vegetarians and rely heavily on native shrubs and grasses for both nutrition and water.
- They are well-adapted to the extremes of the desert and can withstand ground temperatures as high as 140° F.
- Tortoises excavate and occupy burrows to escape cold & hot weather. They will also utilize shade from boulders, vegetation and even vehicles.





Points to touch on when talking with the crews at morning and evening briefings.  
Keep statements short and to the point. You don't have to hit on all of these points at every briefing.

---

### *Safety*

- The Santa Monica Mountains are a dangerous fire-fighting landscape with steep slopes and canyons, erratic winds, and extreme fire behavior. There are many homes scattered throughout a wildland matrix with narrow roads and poor access. Communications may be limited in some canyons. **Always know where you are and have an escape plan.** Be prepared for wind shifts.

### *MIST*

- Mediterranean ecosystems are exceptionally diverse in plant and animal species but they are easily degraded when soil is exposed and shrub cover is removed – please use a light touch when mopping-up and minimize impact to the area. Please refer to MIST guidelines in the IAP.

### *Archeology*

- This park is dense with archeological sites. If you believe you've happened to find something that may be an historic or prehistoric artifact please take a GPS point and get that to the READ.
- Archeological sites and locations are confidential so please handle discretely. Artifacts are to be left where they are seen, context is everything for archeology and they are not souvenirs!

### *Wildlife*

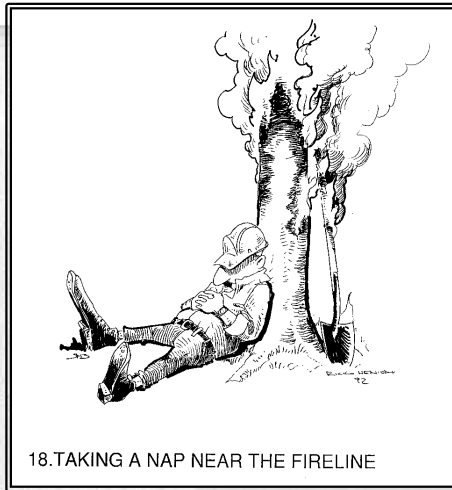
- Steelhead Trout and Red-Legged Frogs are federally listed species that occur in SAMO in some of the streams. Critical habitat for these endangered species is shown on the Retardant Avoidance Map. Any work, and fire retardant, should avoid these habitat areas. Whenever possible it is always good practice to avoid disturbance in stream corridors.
- Animals will flee, shelter in refugia, or be killed by the fire so there is a good chance you may encounter them on the fireline.
- Be aware of wildlife and drive carefully. This will help minimize hitting or killing animals that may be on the roads, especially at dawn and dusk. Watch for reptiles basking on or crossing roads during the middle of the day, and for amphibians during rain events.
- There are rattlesnakes at SAMO. Watch your step while hiking in all vegetation types, particularly along stream banks and around rocks and the edges of shrubs. Look before placing your hands under any rocks or trees to move them. If you see a rattlesnake, just let it be. They are generally afraid of humans, but may strike if stepped on or threatened.

### *Weeds/Other Invasives*

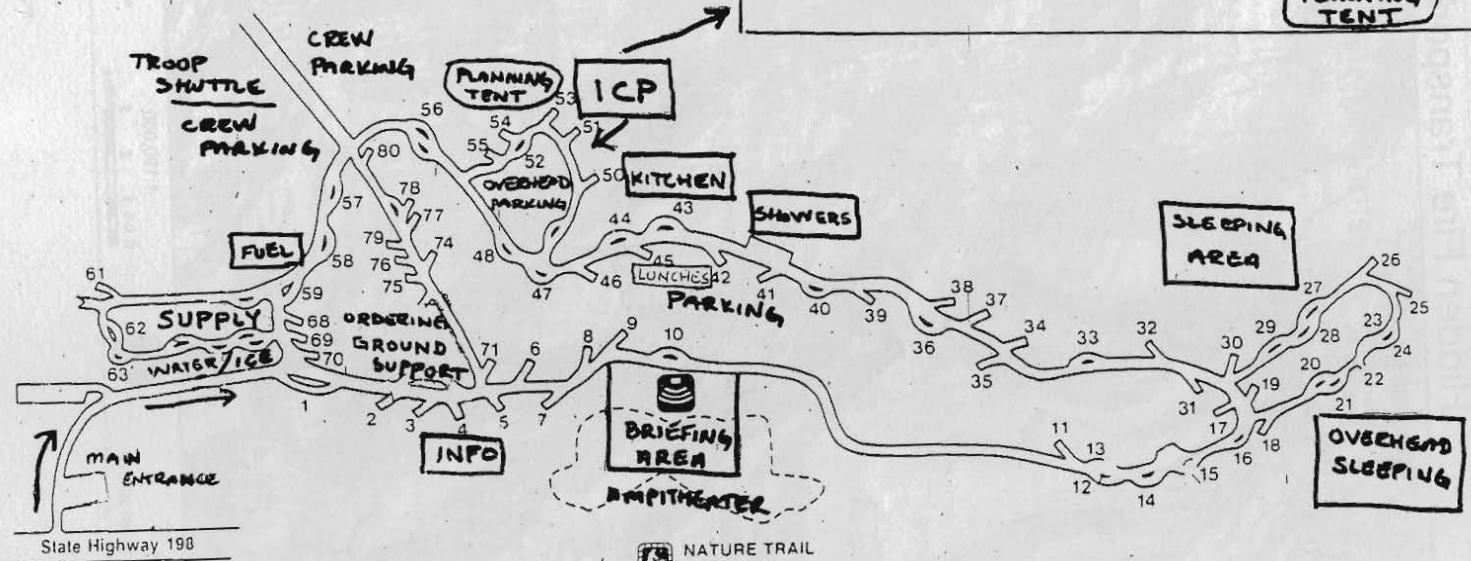
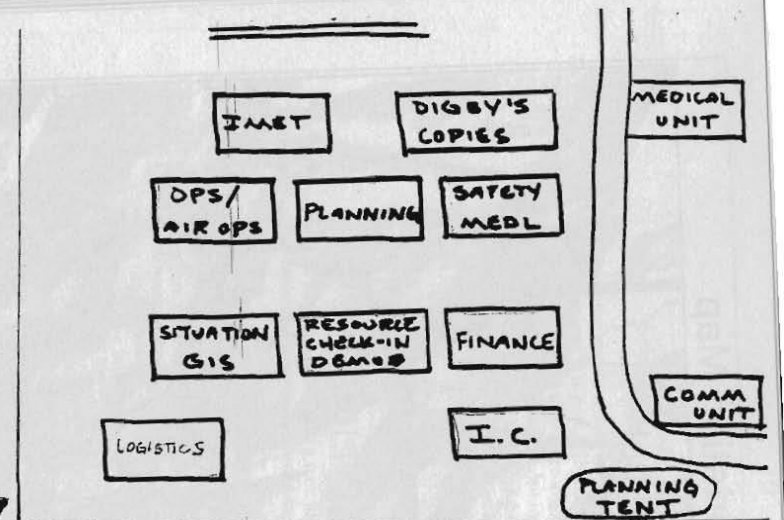
- Please visually inspect your boots, socks, clothing, tools, equipment and personal belongings for seeds and soil before heading out on the fireline or before you return to your home base. This will help us keep invasive plants from spreading within the park or moving outside to other areas.
- The **New Zealand mudsnail** is in some of our streams. Do not transfer mudsnails from an infected stream to another stream. You can avoid this most easily by staying out of the water. If you happen to get any gear wet in an infected stream, the only way to avoid moving the mudsnails, which are tiny and very hard to see, is by killing them through completely drying or freezing any gear that got wet for a minimum of 36 hours.




# DAY 2, 1200: Kissing hands, shaking babies...



18. TAKING A NAP NEAR THE FIRELINE



PLEASE KEEP TABLES AND  
CAMPSITES CLEAN

 NATURE TRAIL  
Half Mile Long  
Brochure available at  
Fee Station or from a Park Ranger





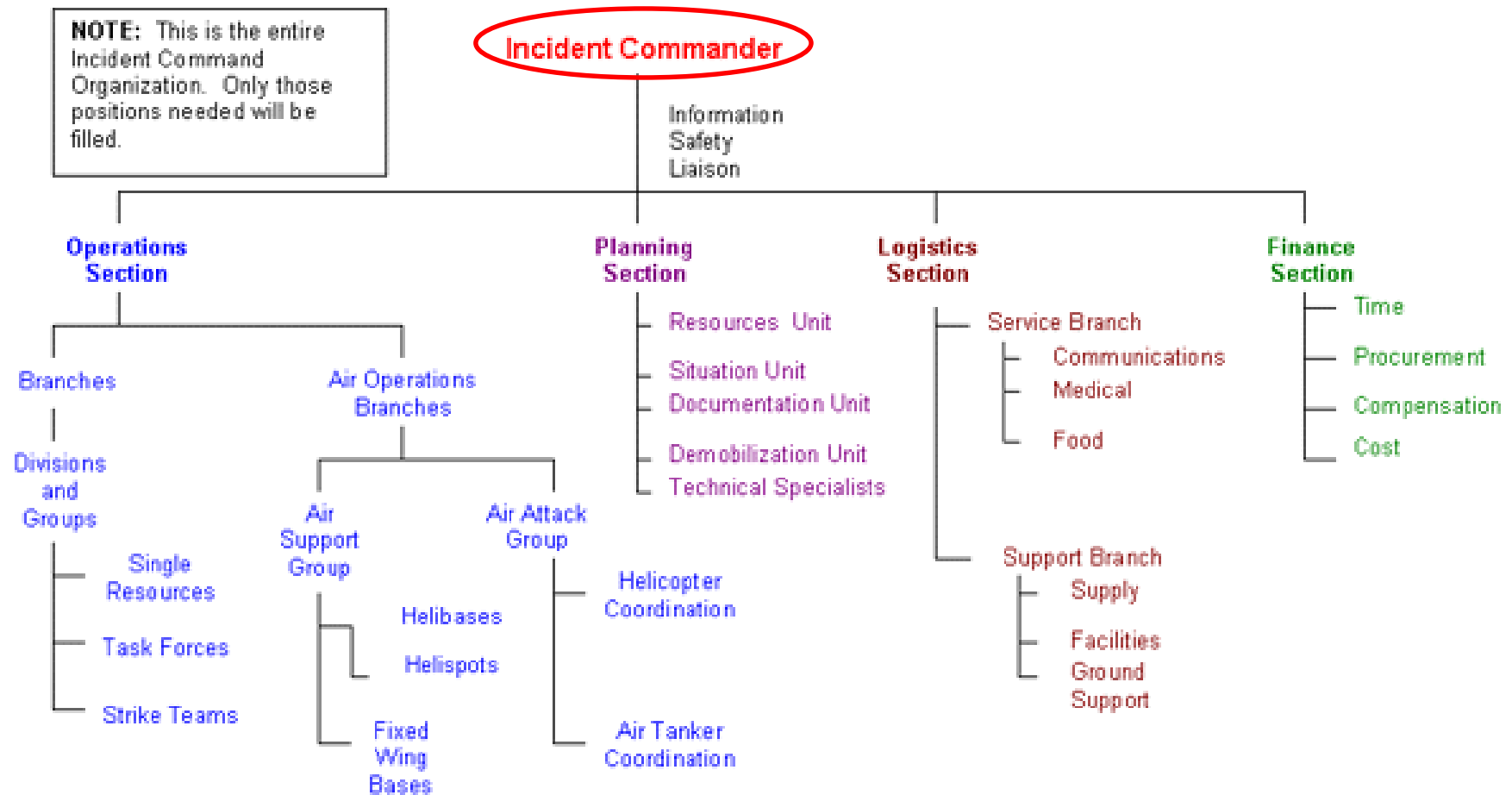






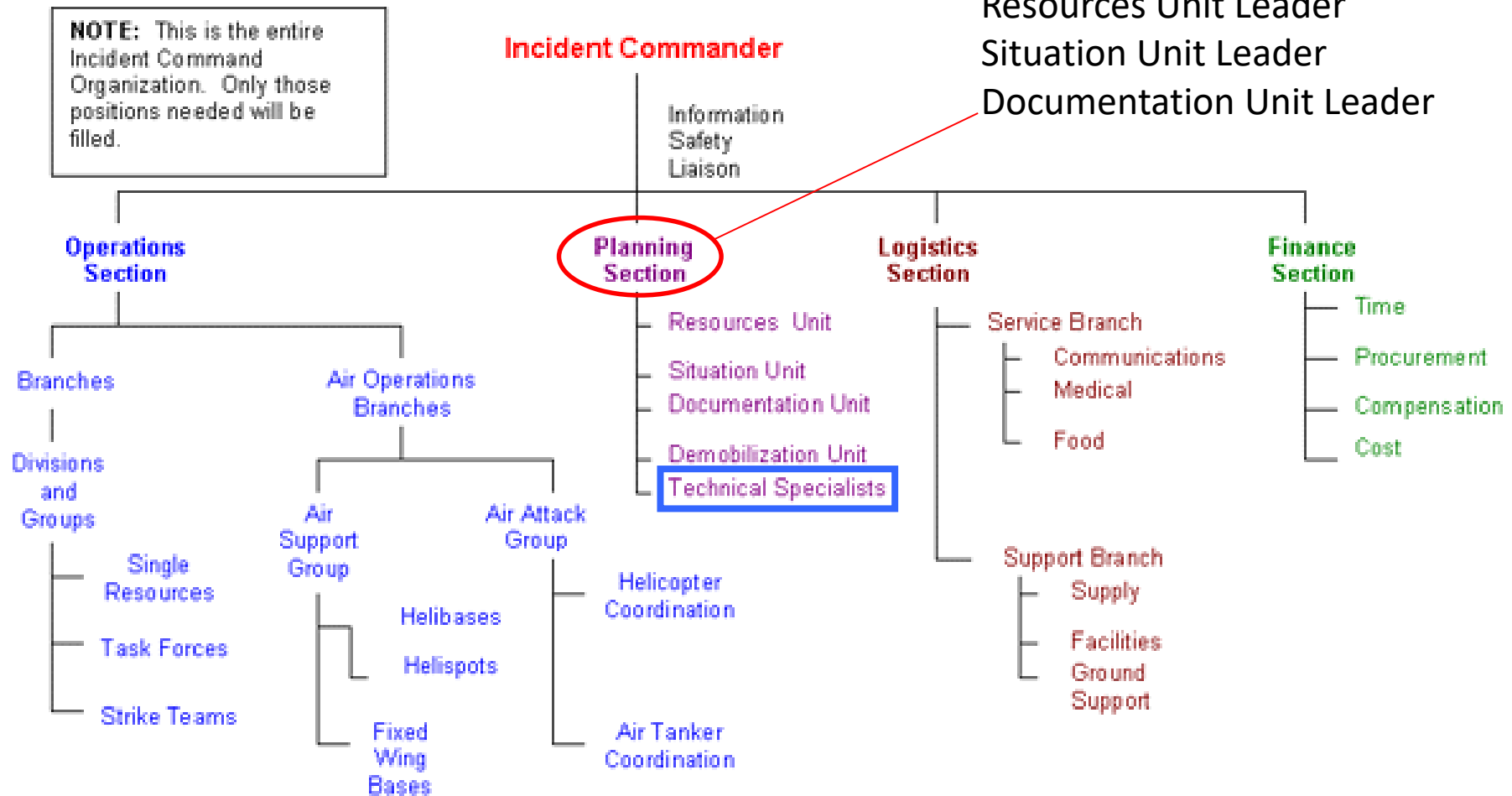
# DAY 2, 1200: Pressing Flesh Cont.

## Incident Command System Organization



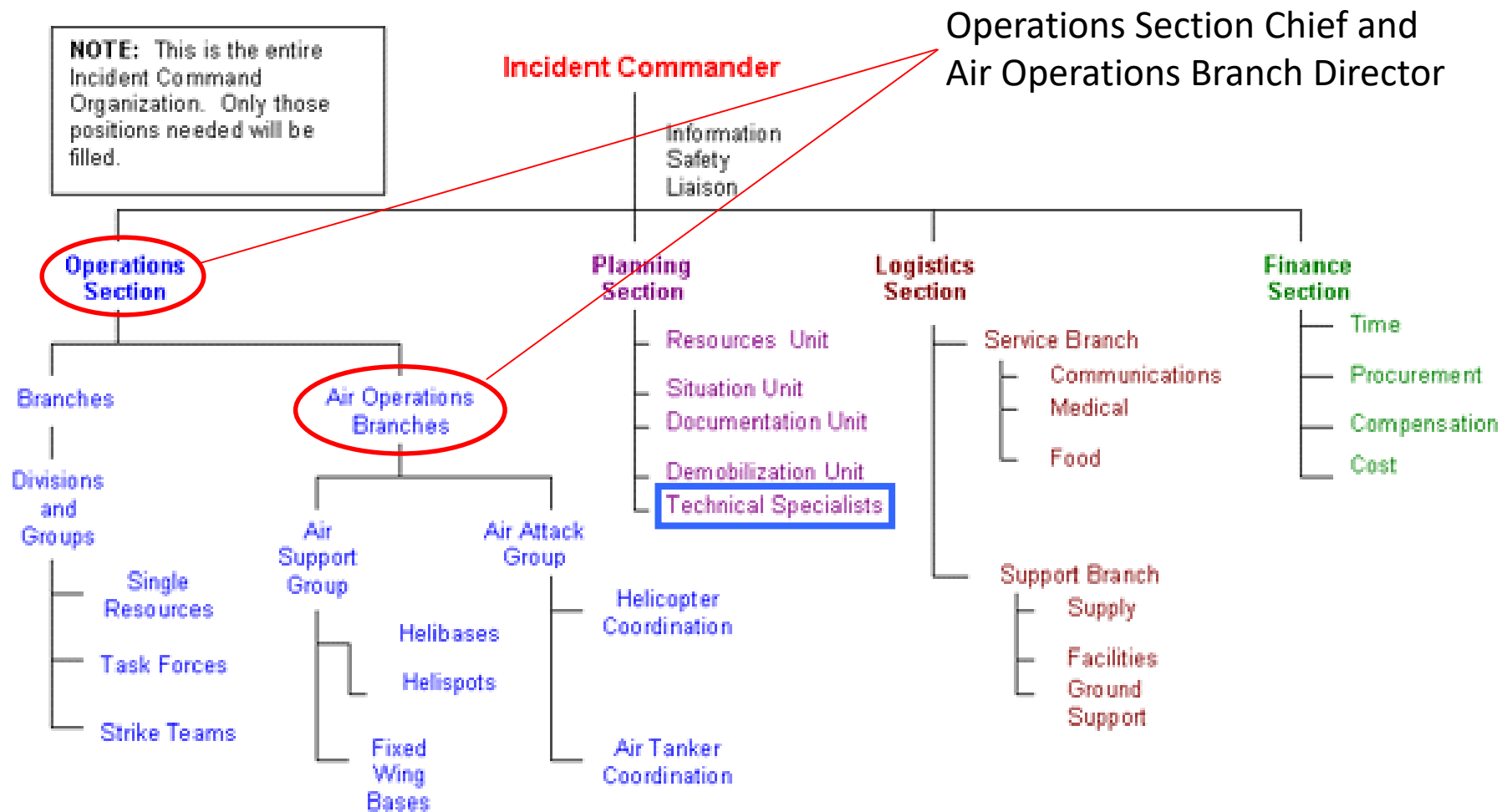
# DAY 2, 1200: Pressing Flesh cont.

## Incident Command System Organization



# DAY 2, 1200: Pressing Flesh cont.

## Incident Command System Organization

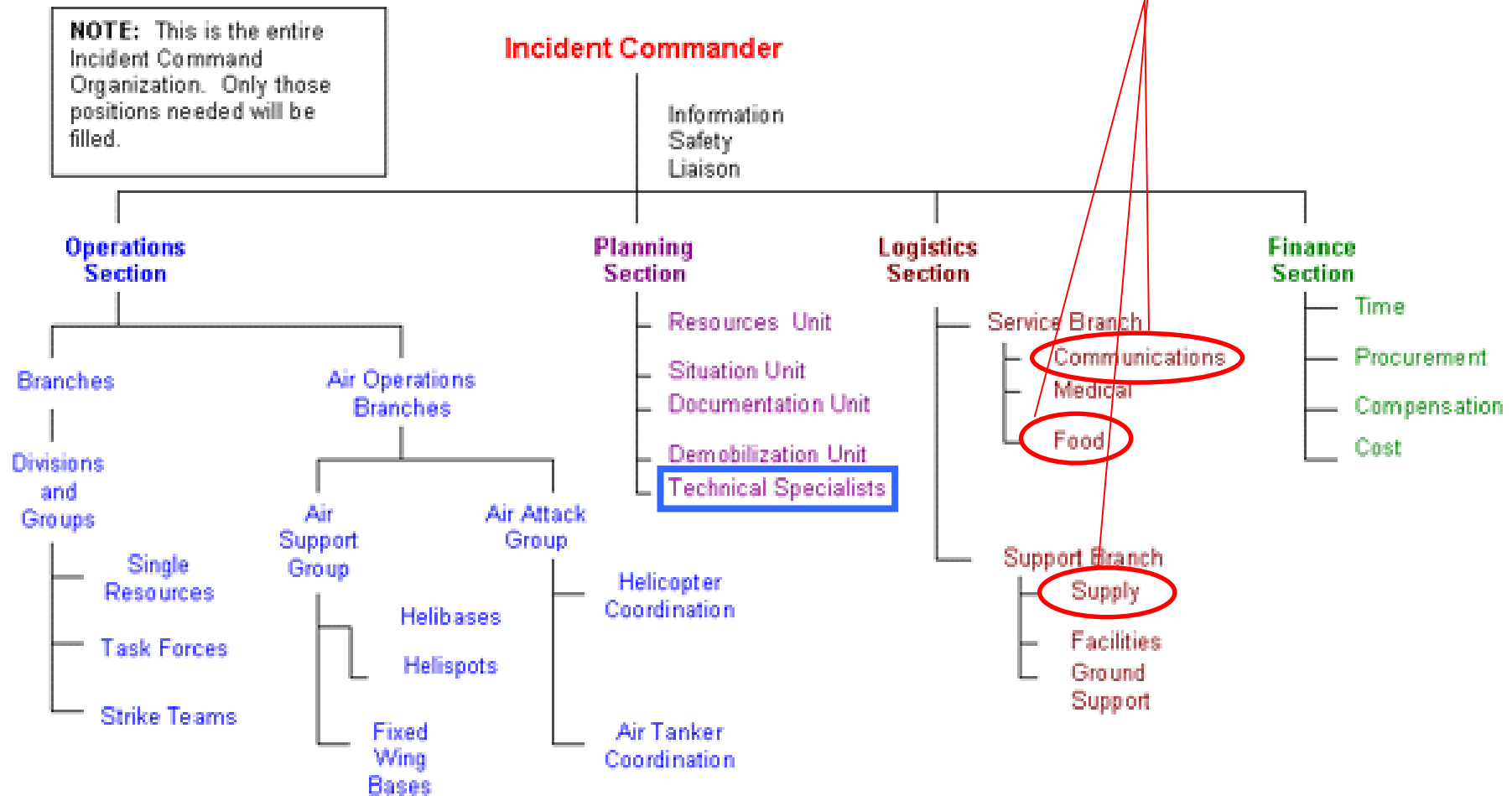




# DAY 2, 1200: Pressing Flesh cont.

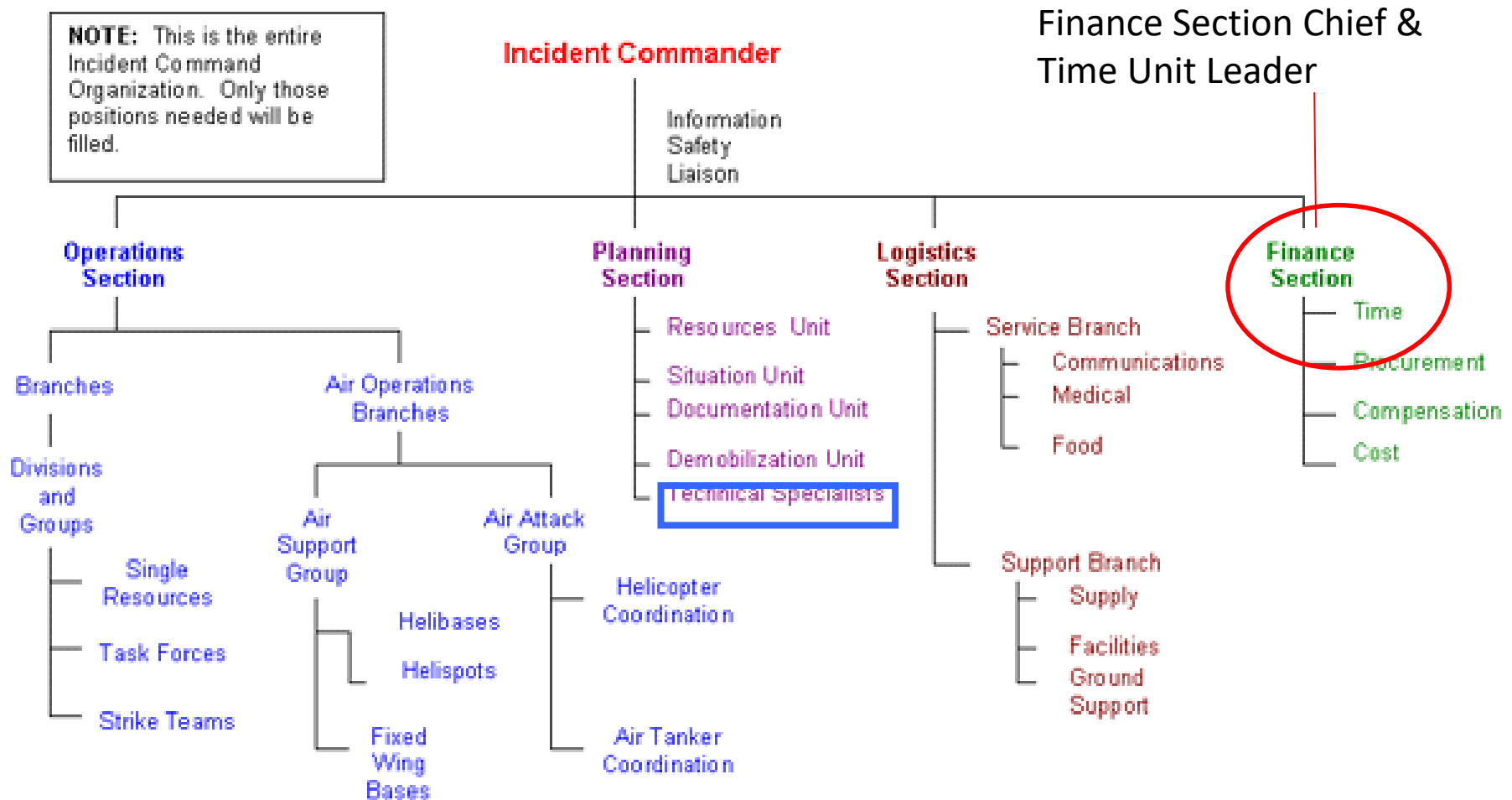
## Incident Command System Organization

Communications= Radio  
Food Unit Leader= Bears  
Supply= Supplies



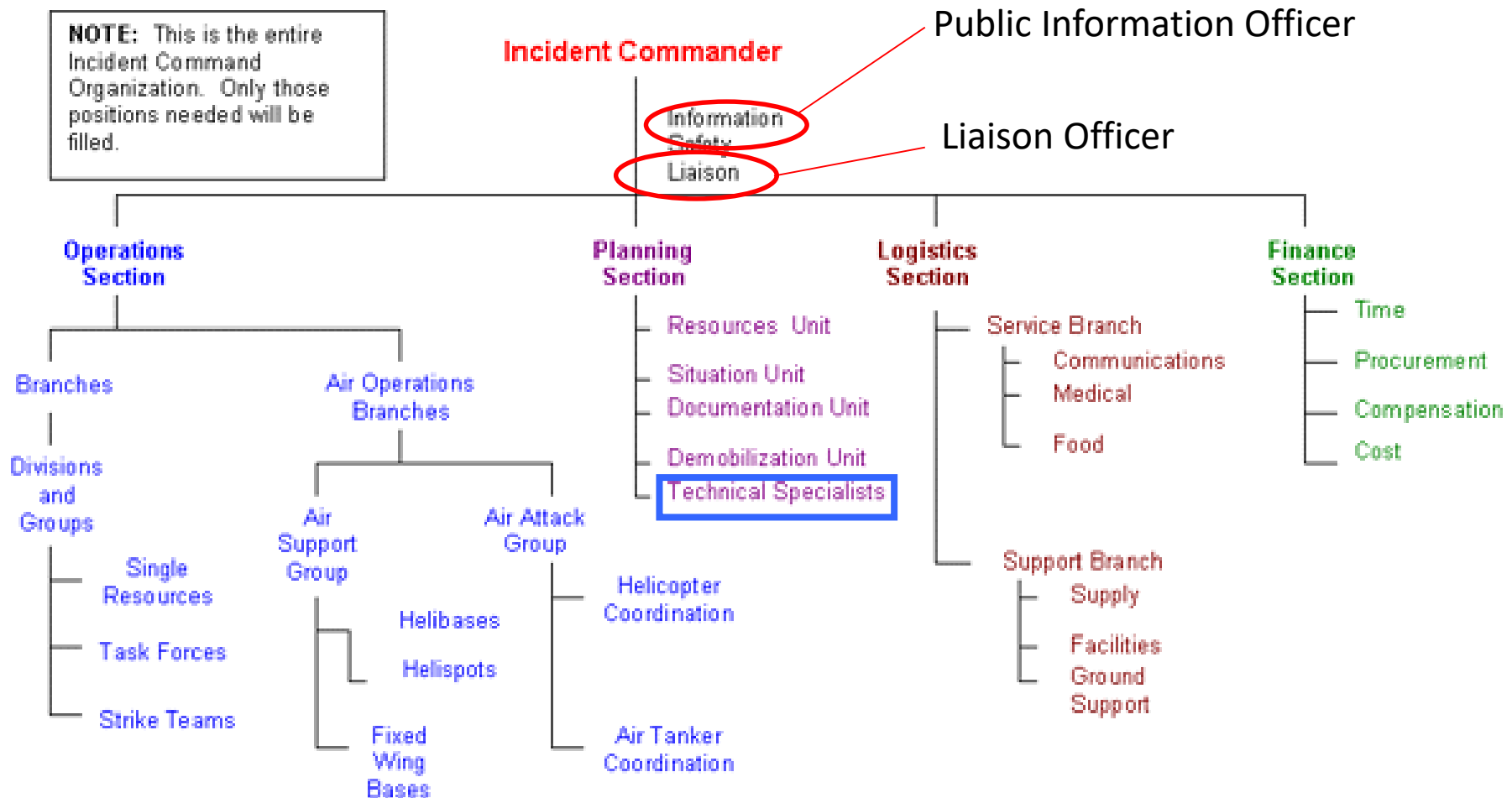
# DAY 2, 1200: Pressing Flesh cont.

## Incident Command System Organization



# DAY 2, 1200: Pressing Flesh cont.

## Incident Command System Organization





# Cedar Drake – Lead Resource Advisor

## Contact Information

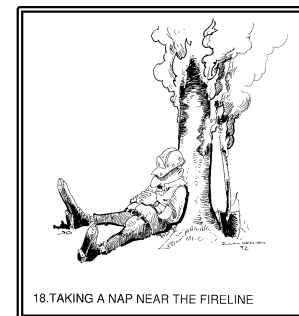
I am splitting my time between the ICP and Fire Management Office. I have no cell coverage at either locations, but do at various points in between (including my sleeping area). Try to contact me in the following ways:

**Cell Phone** = 360.567.8901

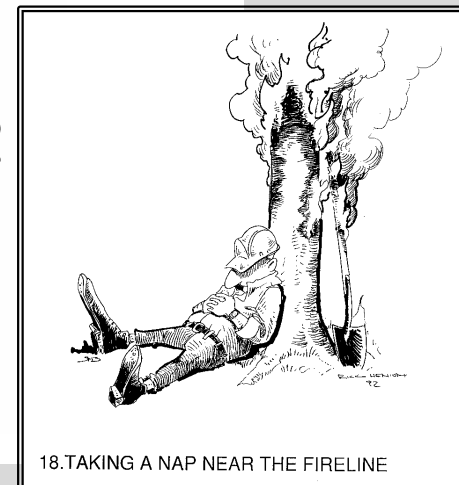
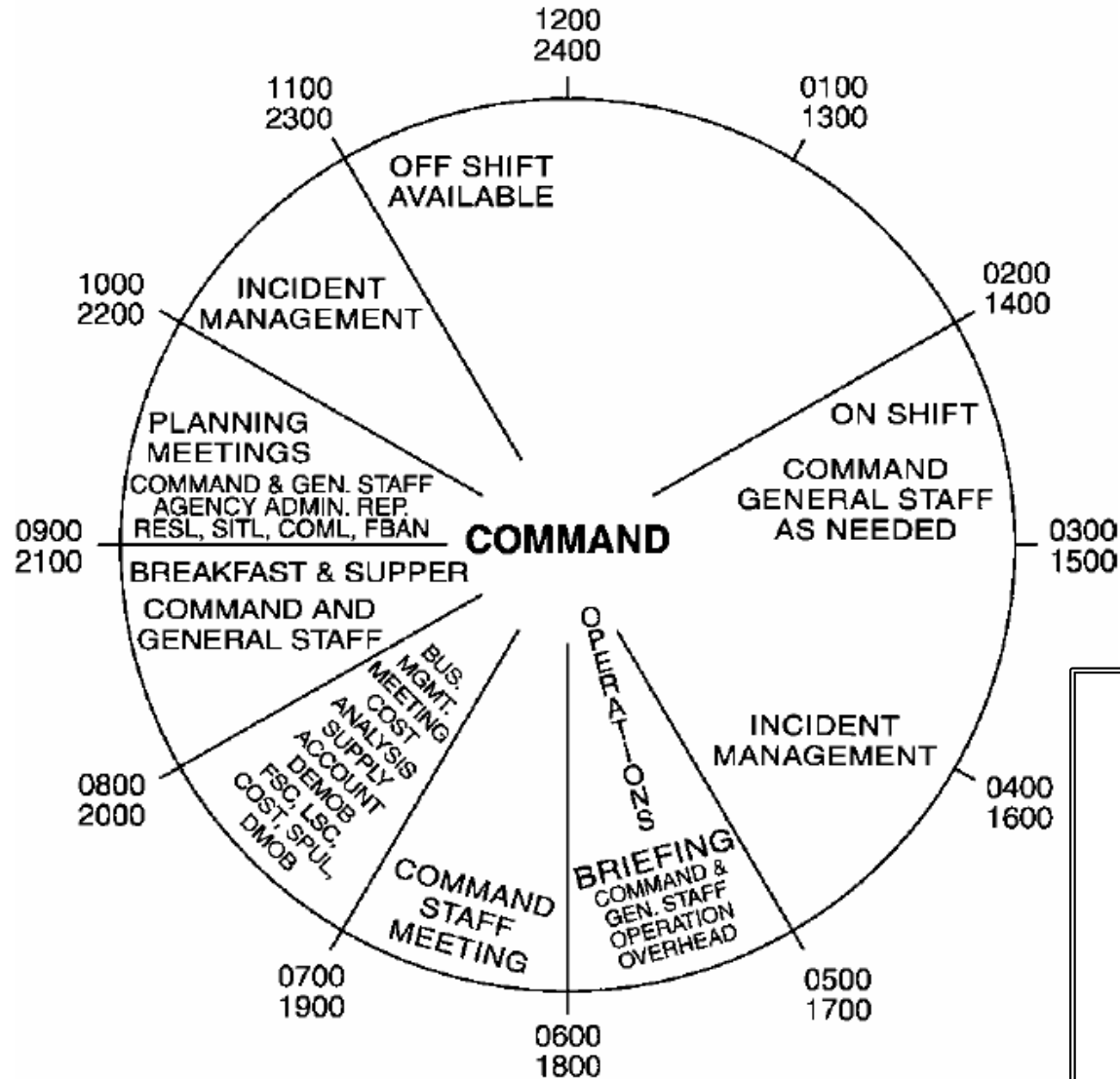
**Fire Dispatch** = 557.655.3456 (ask for Cedar)

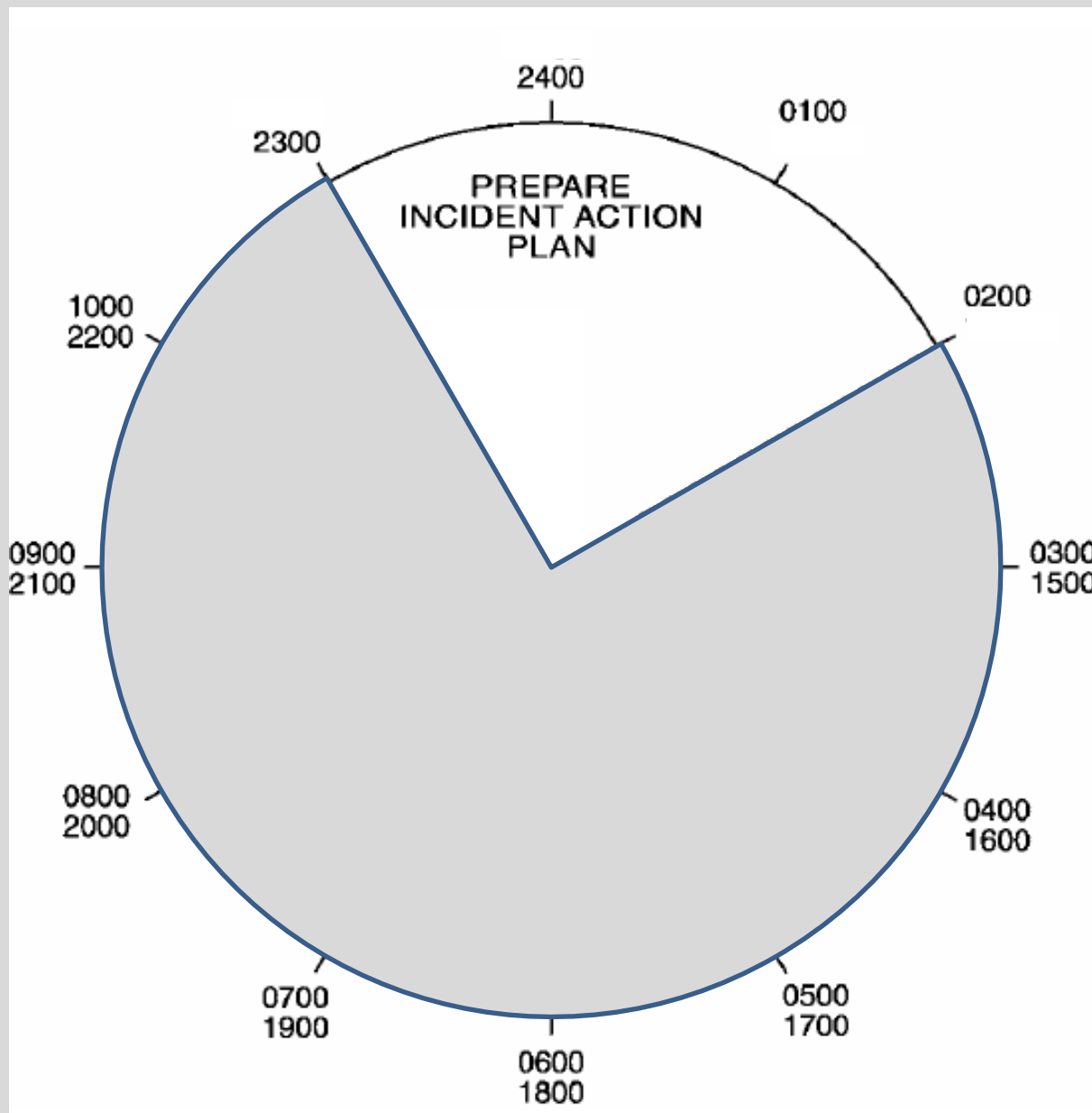
**Email** = [cedar\\_drake@nps.gov](mailto:cedar_drake@nps.gov)

**Radio** = “Resource Advisor Drake”

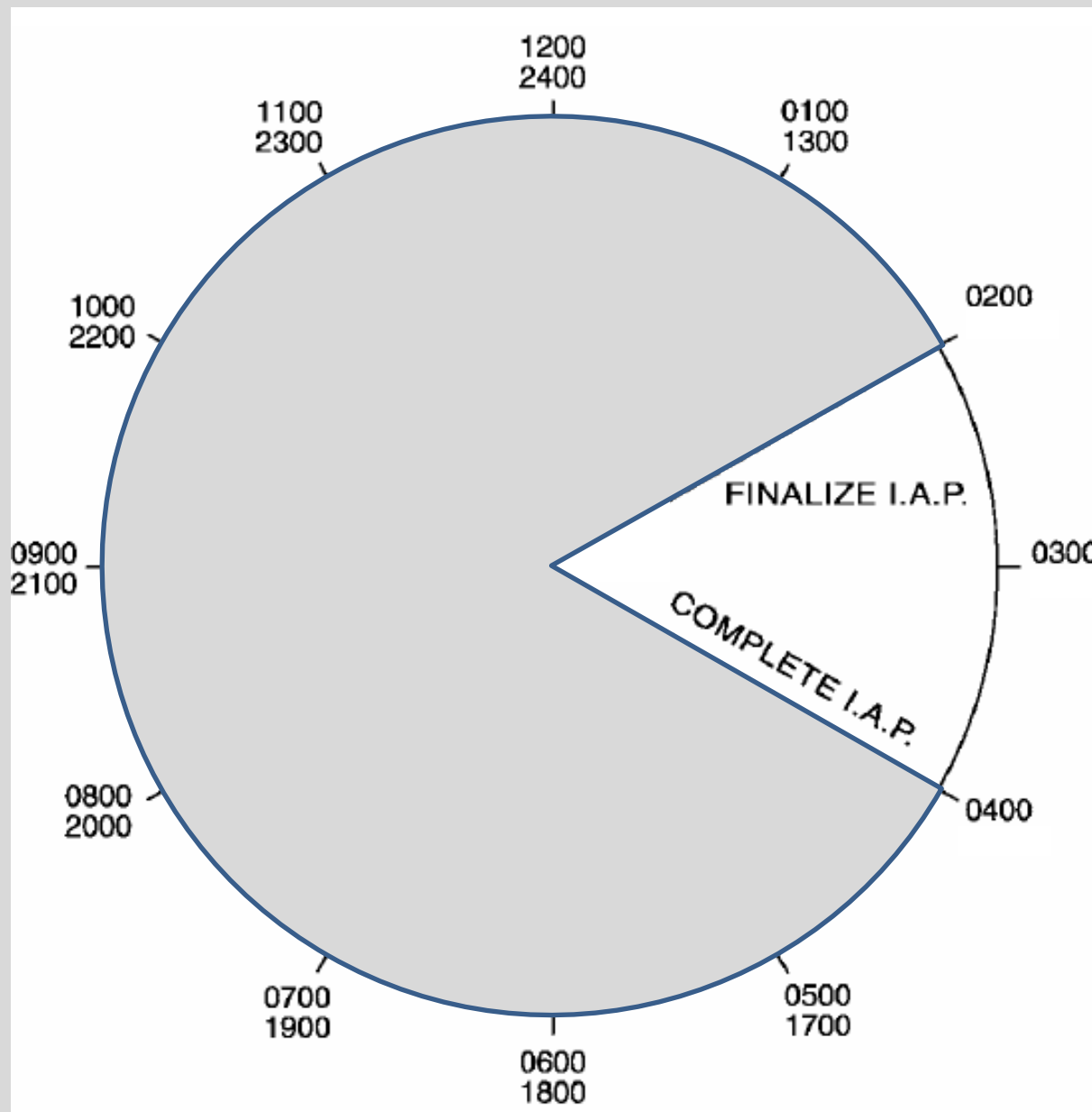


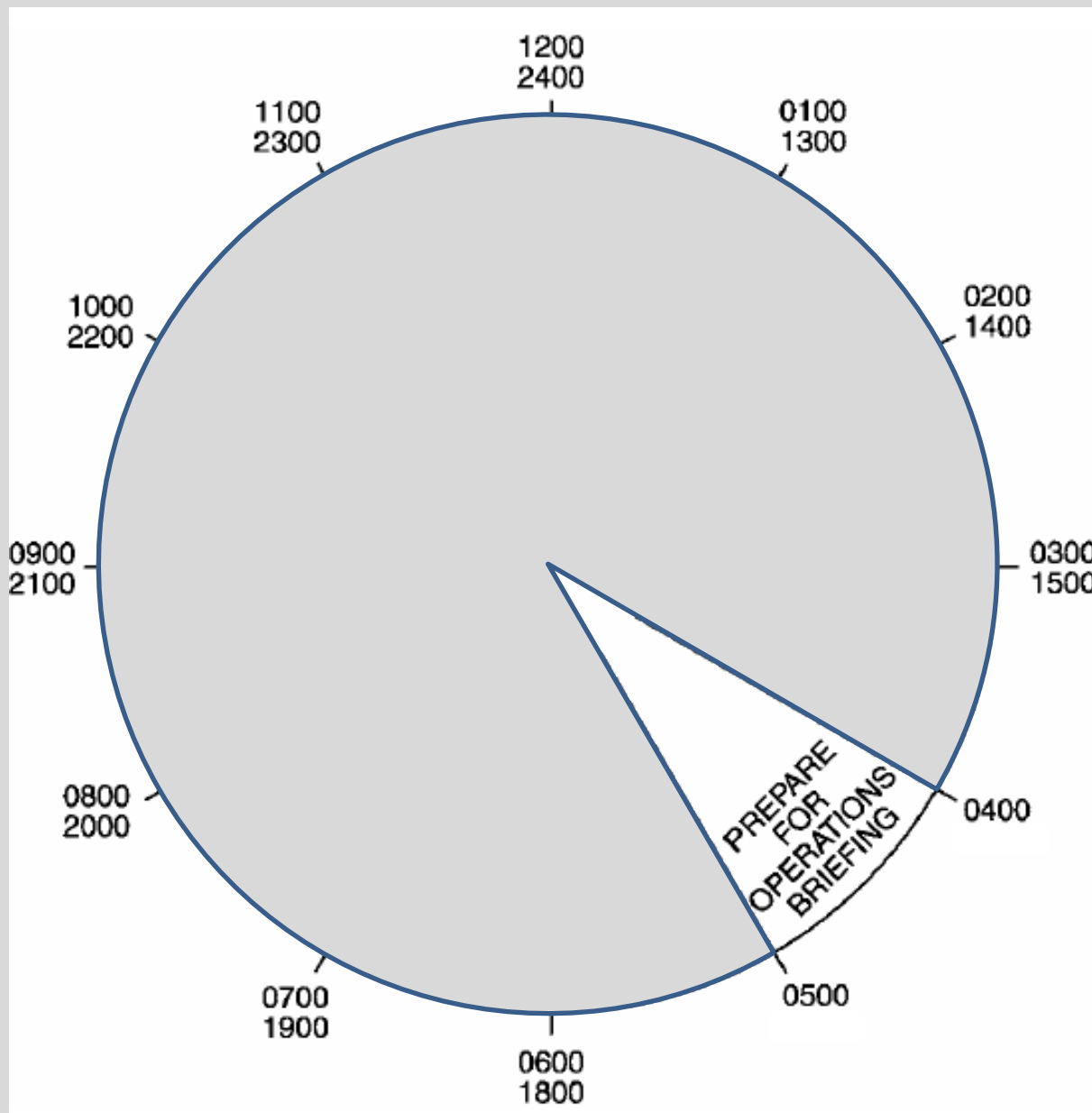
# The Planning Cycle

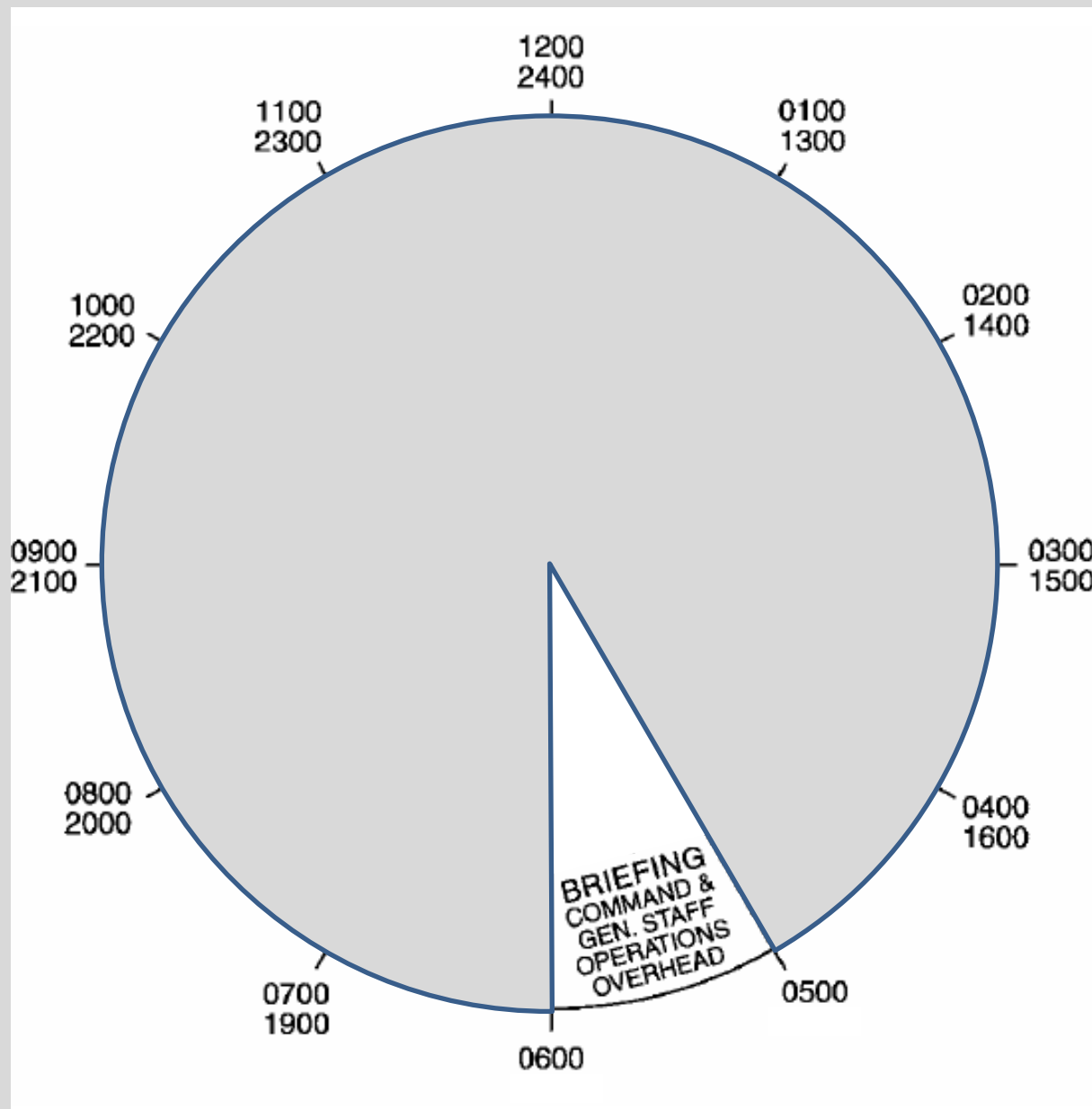




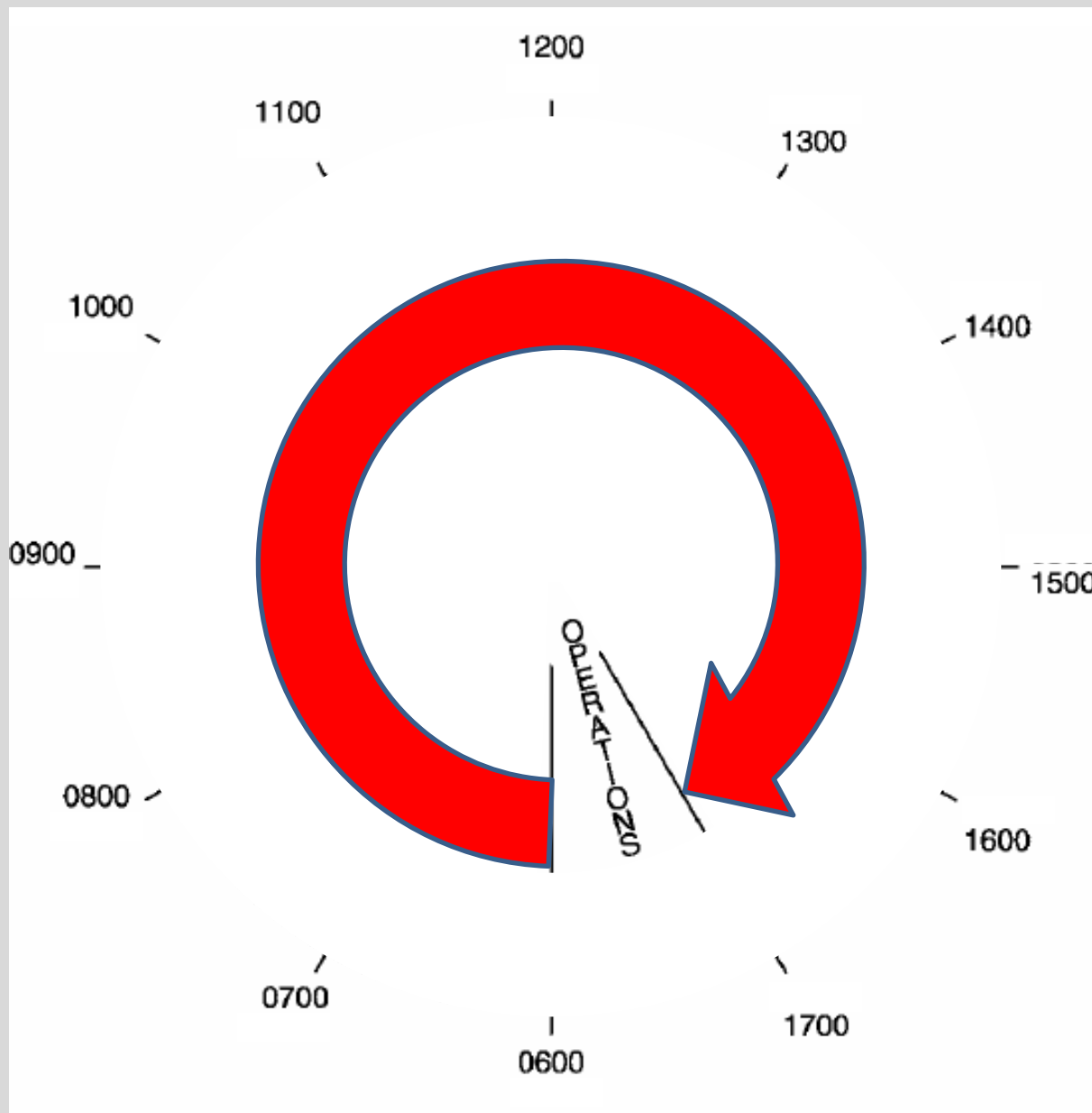


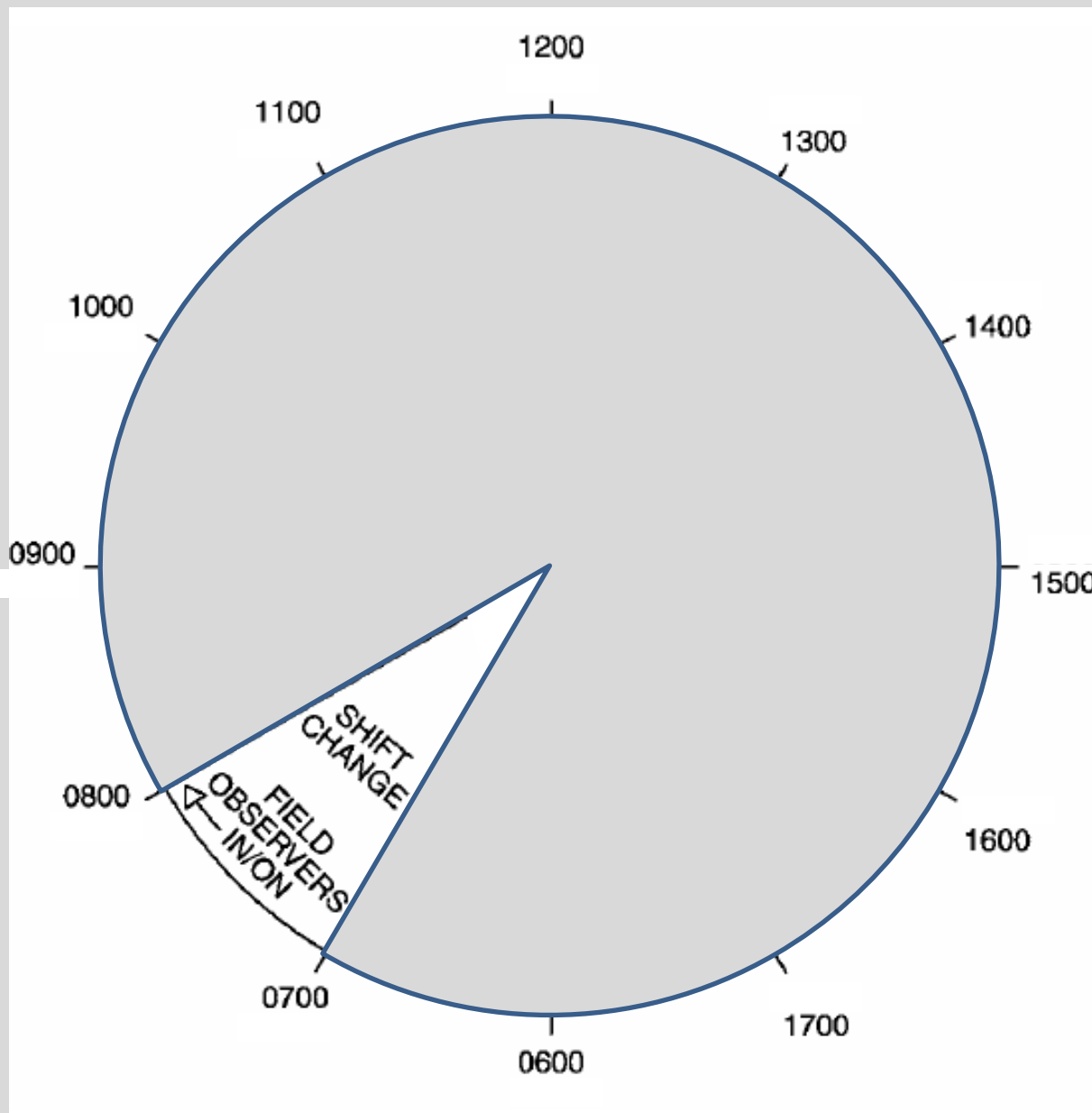


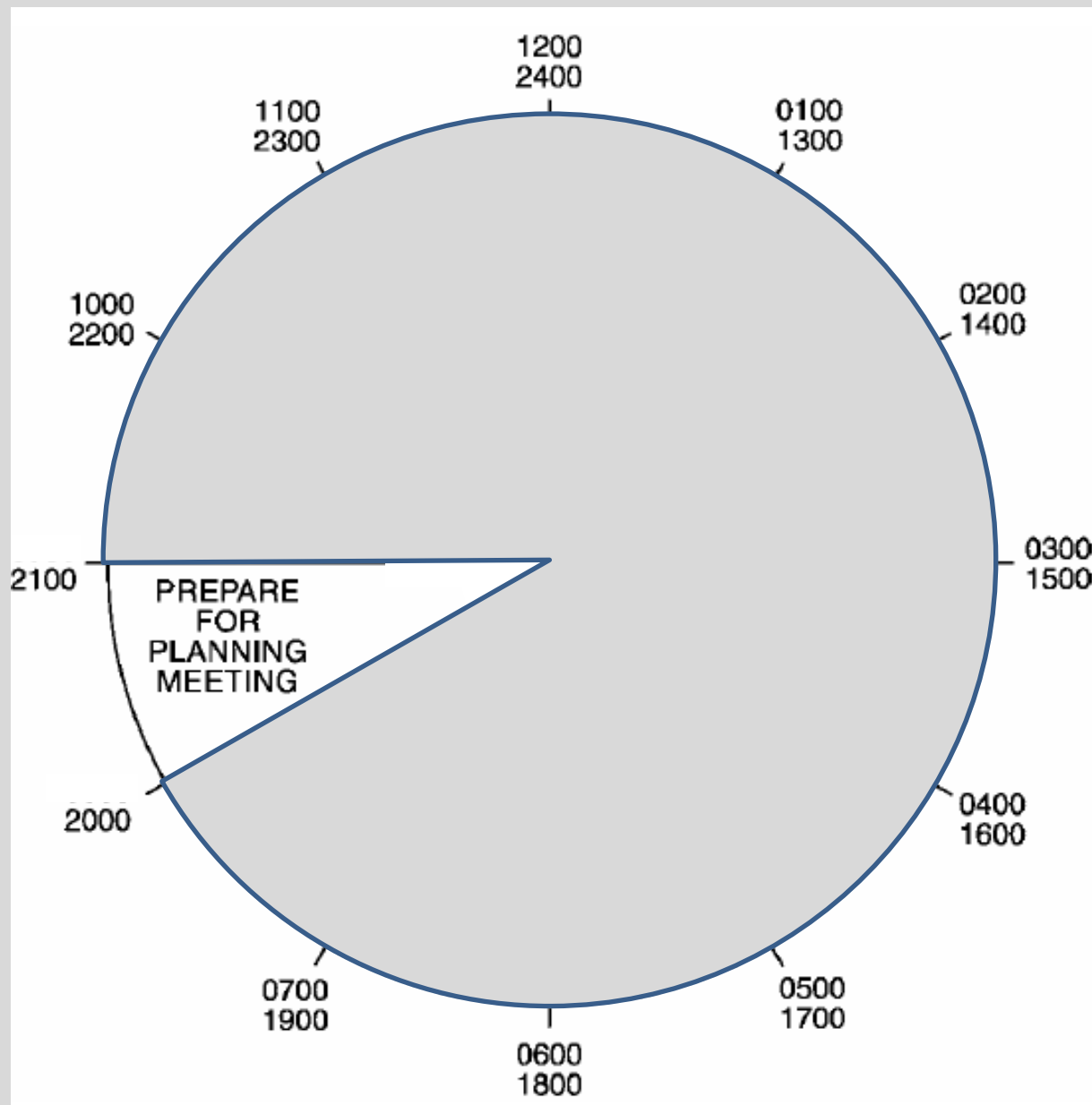




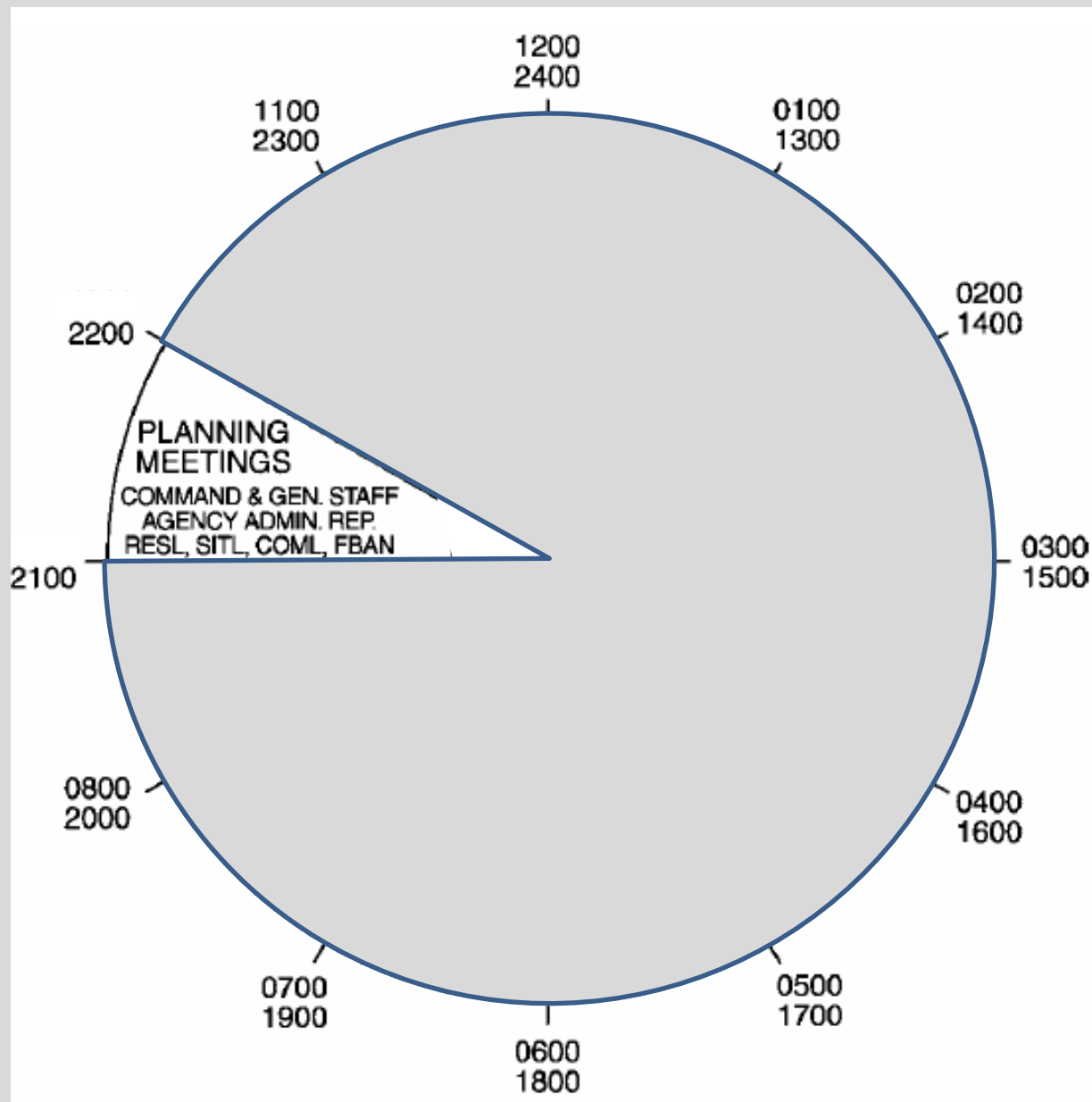


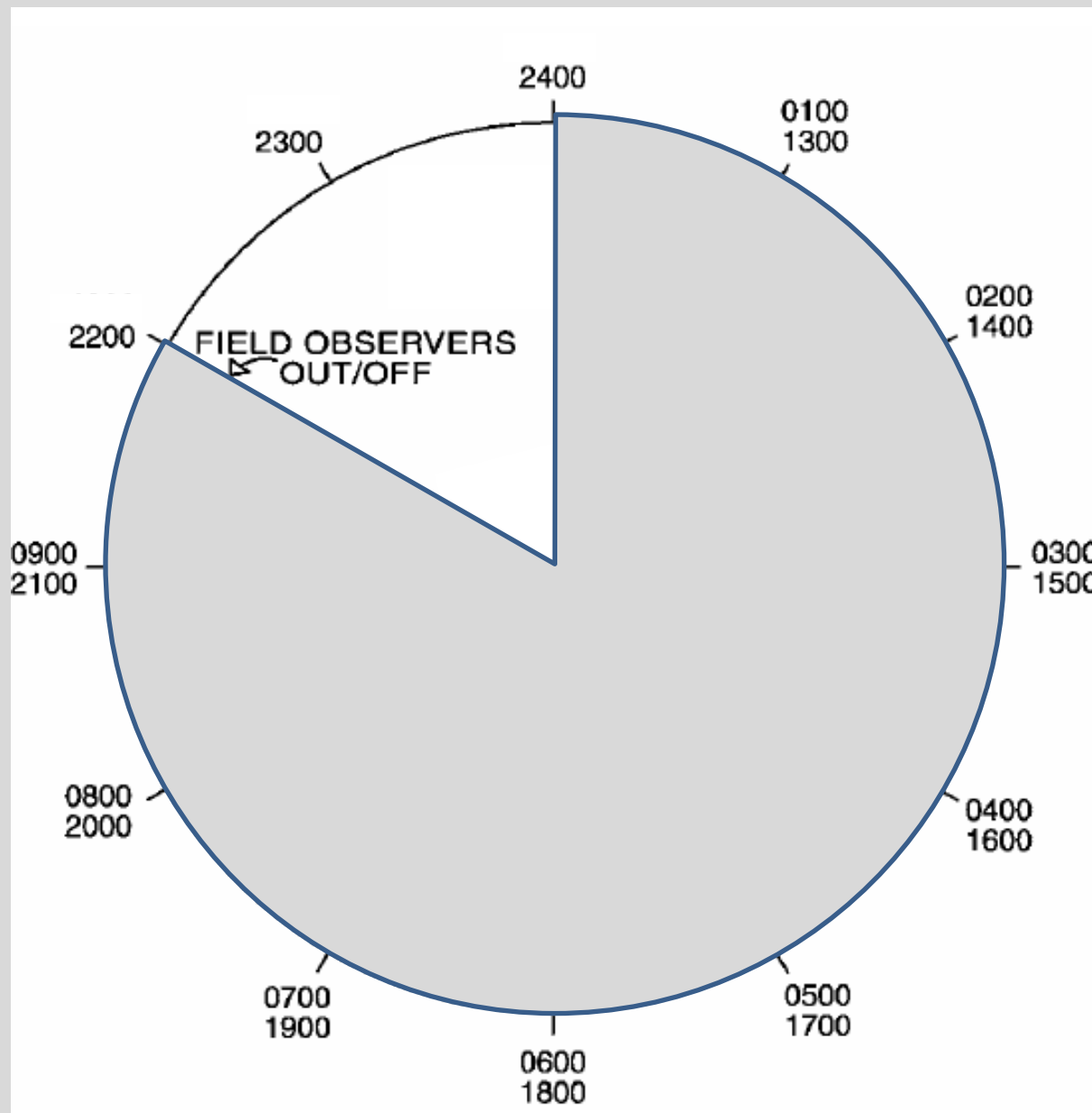


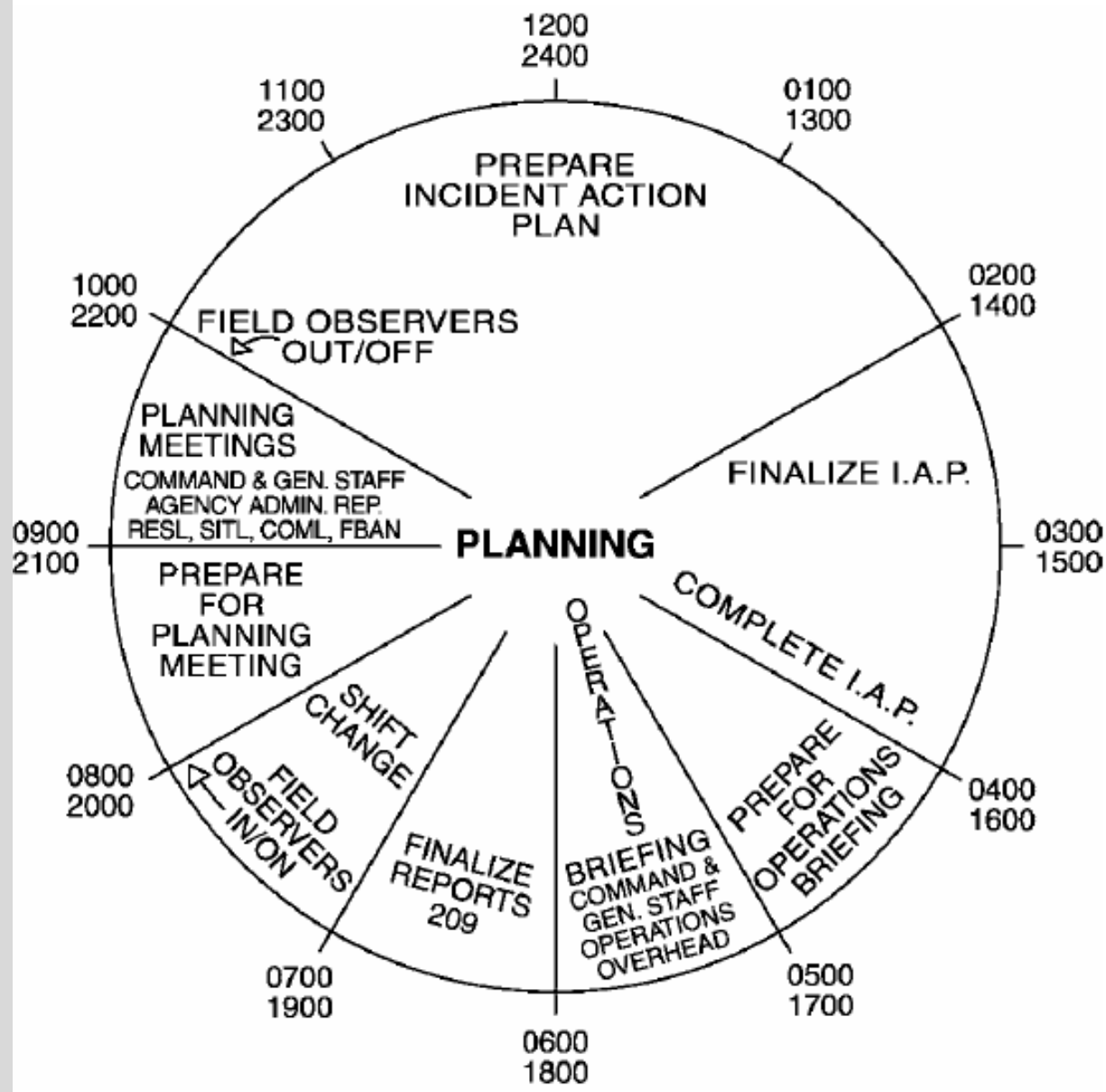






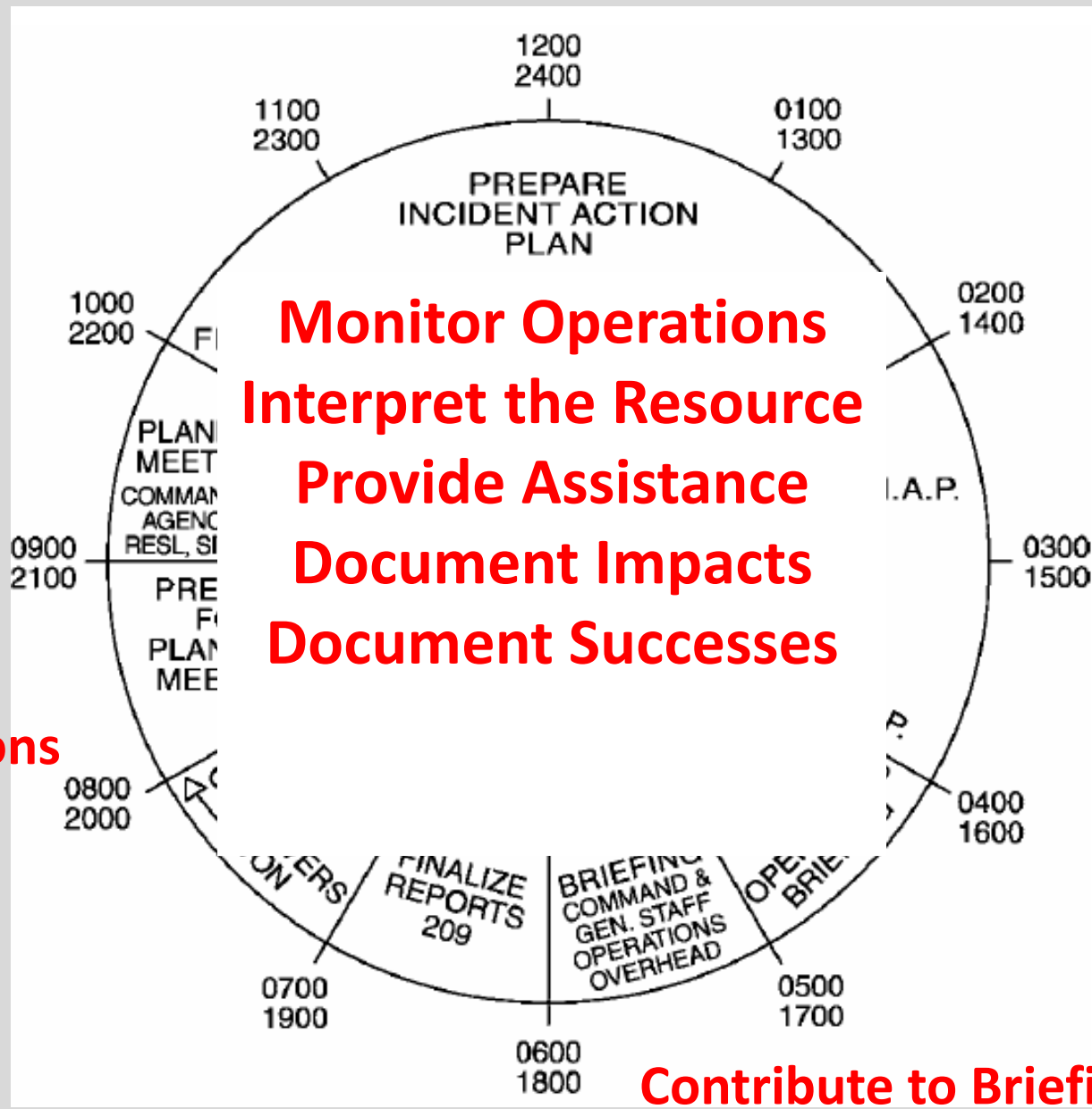








REAF Cycle

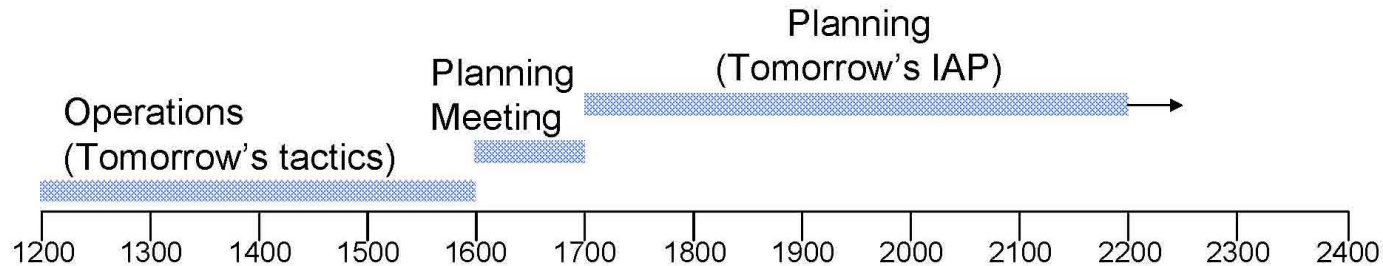


Report  
Observations

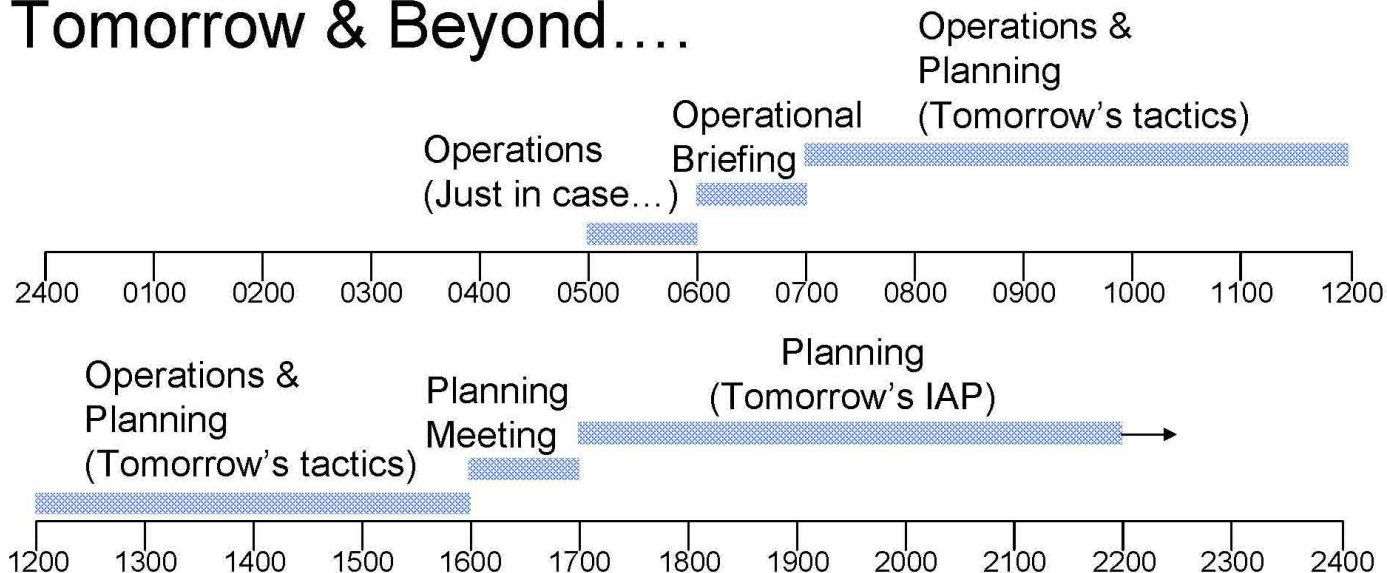
Contribute to Briefings

# DAY 2, 1230: Grouse Fire Planning “Cycle”

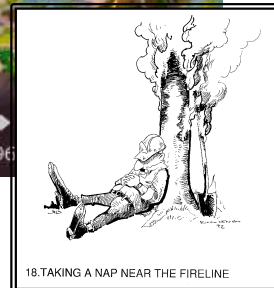
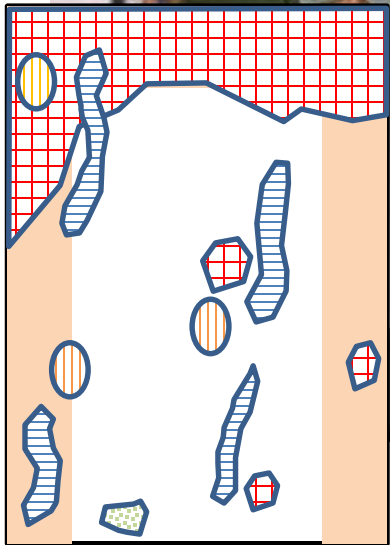
Today....



Tomorrow & Beyond....



# DAY 2, 1200 to 1600: Tomorrow's Tactics (aka Pre-Planning Meeting)



18. TAKING A NAP NEAR THE FIRELINE

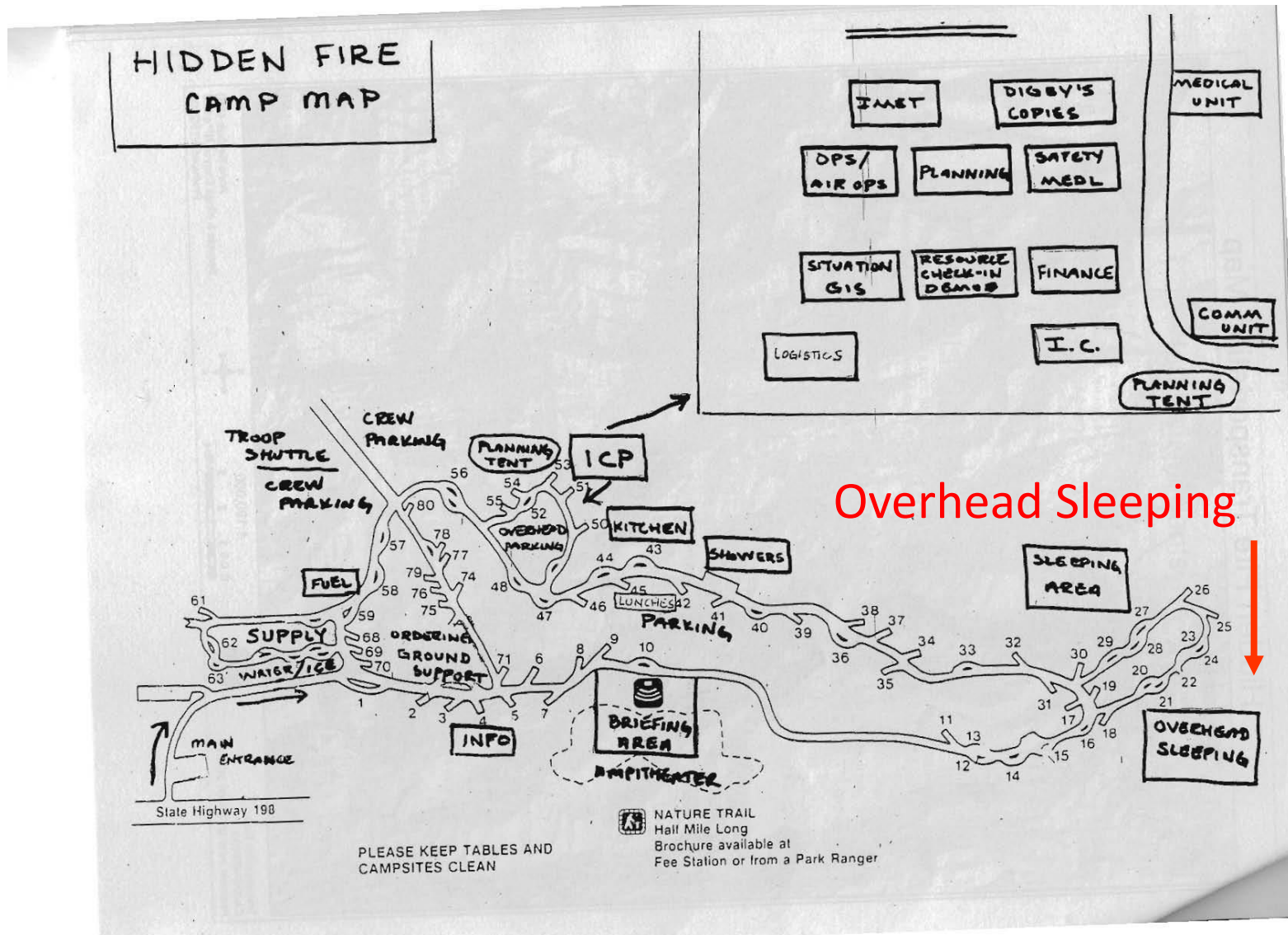


# DAY 2, 1200 to 1600: Tomorrow's Tactics, READ Input

- Don't speak unless spoken to...fly on the wall. Interject when called upon and/or windows of opportunity
- OPS talks about the difficulty of holding the fire on the NW corner of the box (ridge between Bee Creek and Beaver River)...steep, lots of fuel, dangerous for crews
  - Q: Can we use fire retardant?
  - A: Yes, but has to be on the crest of the ridge or on the Beaver River side
- IC stops by...he and OPS are clearly apprehensive about this situation. AREP and Cedar note this as a potential emerging problem

# DAY 2, 1400: Cedar & Incoming READs

Get outfitted: radios, sleeping area, etc.







# DAY 2, 1600: Planning Meeting



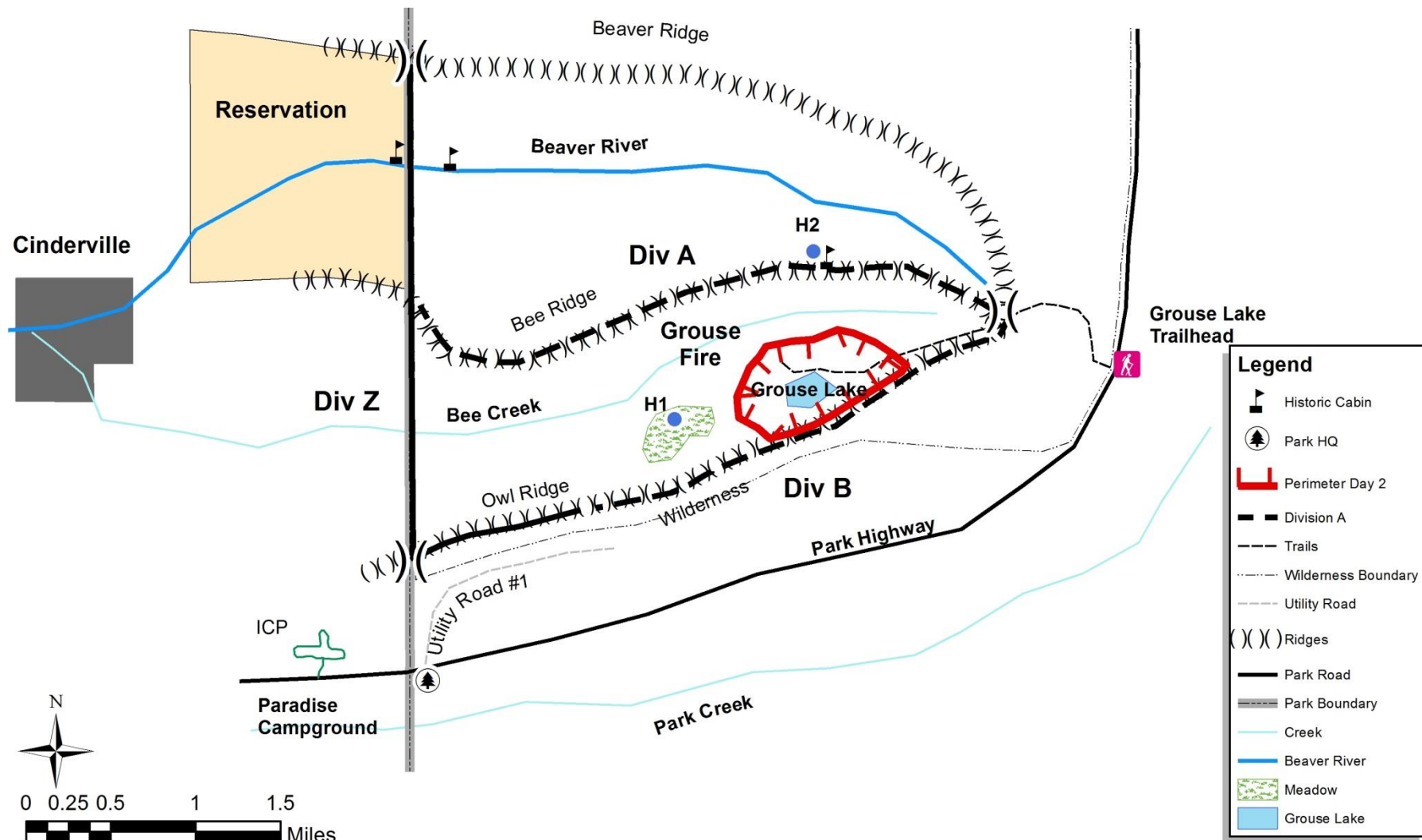
18. TAKING A NAP NEAR THE FIRELINE

# 1600 Planning Meeting cont.

- Attendees: Command & General Staff, RESL, SITL, COML, AOBD, AREP, READ
- Update on current conditions
- Objectives, strategies and tactics for next operational period unveiled
- Deadline for IAP submissions
- “Do you support the plan?”



# Grouse Fire Situation: Day 2, 1600



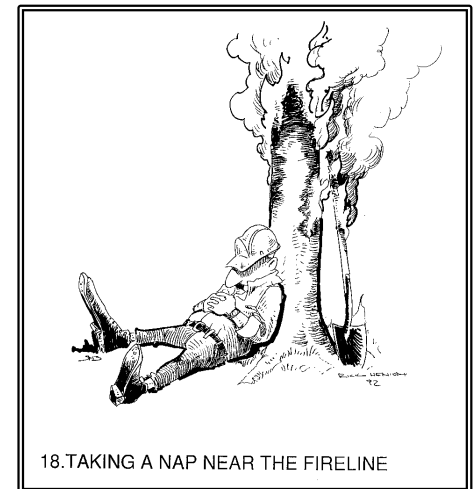


# 1600 Planning Meeting cont.

- READ input for Grouse Fire:
  - Introduce myself, availability, contact information
  - We will have 10 Resource Advisors on this fire, including me; seven REAFs on the line and three READs at the ICP. Two Line REAFs on each Division & Jun Kinoshita will serve as the lead REAF.
  - Indicate I have been meeting with OPS to address resource issues; still need to meet with FDUL to discuss food storage needs.
  - What can we do for you?
  - We support the plan!

# DAY 2, 1700: Convene REAFs

- Brief REAFs on objectives, strategies and tactics for tomorrow's operational period
  - Obtain incident map from Situation Unit
- Go over protocols, reporting, logistics, etc.
- REAF share resource issues, operational updates, and concerns
- Problem-solving
- Safety concerns
- Tomorrow's assignments



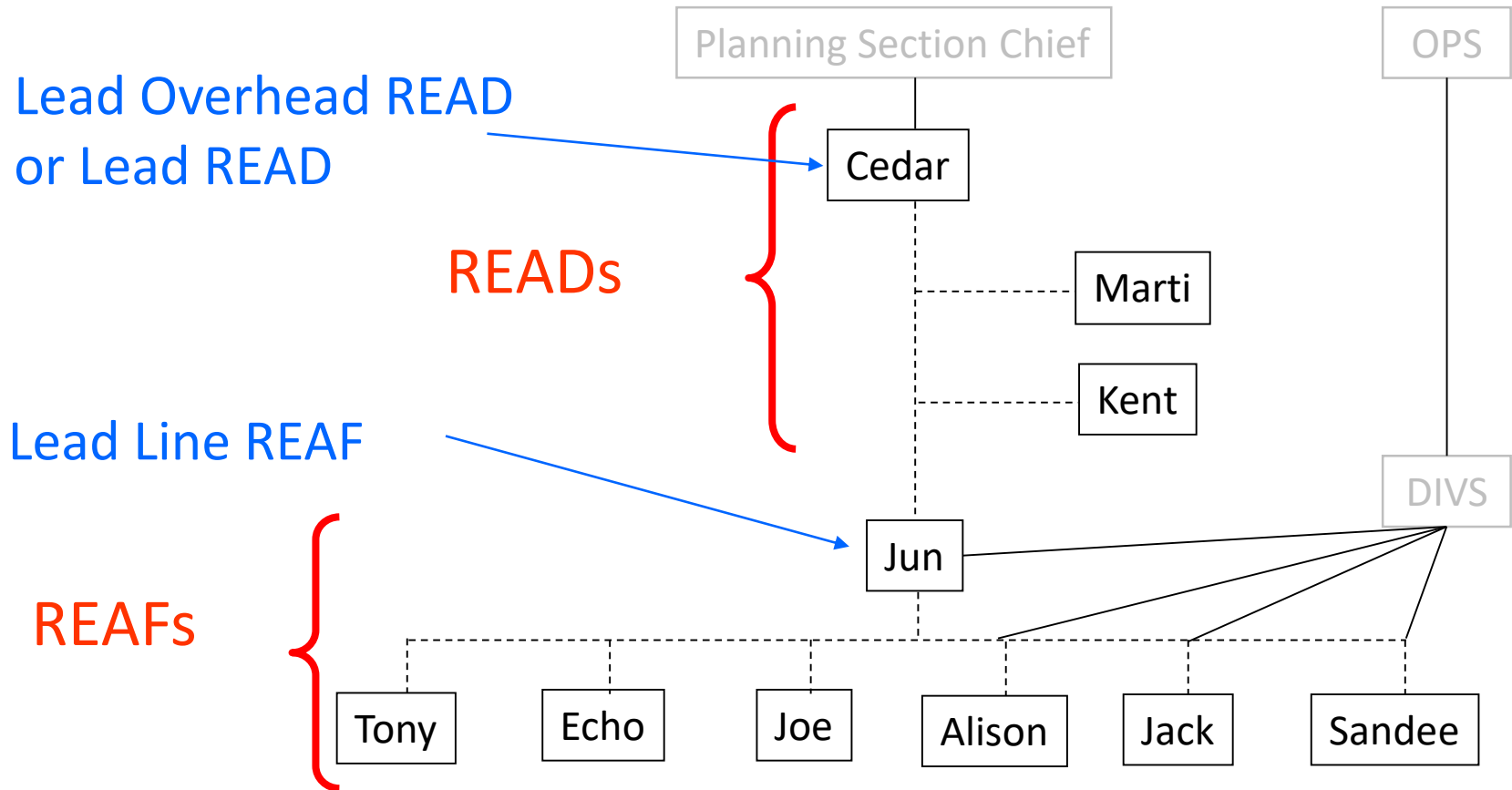




# Death by a thousand snacks



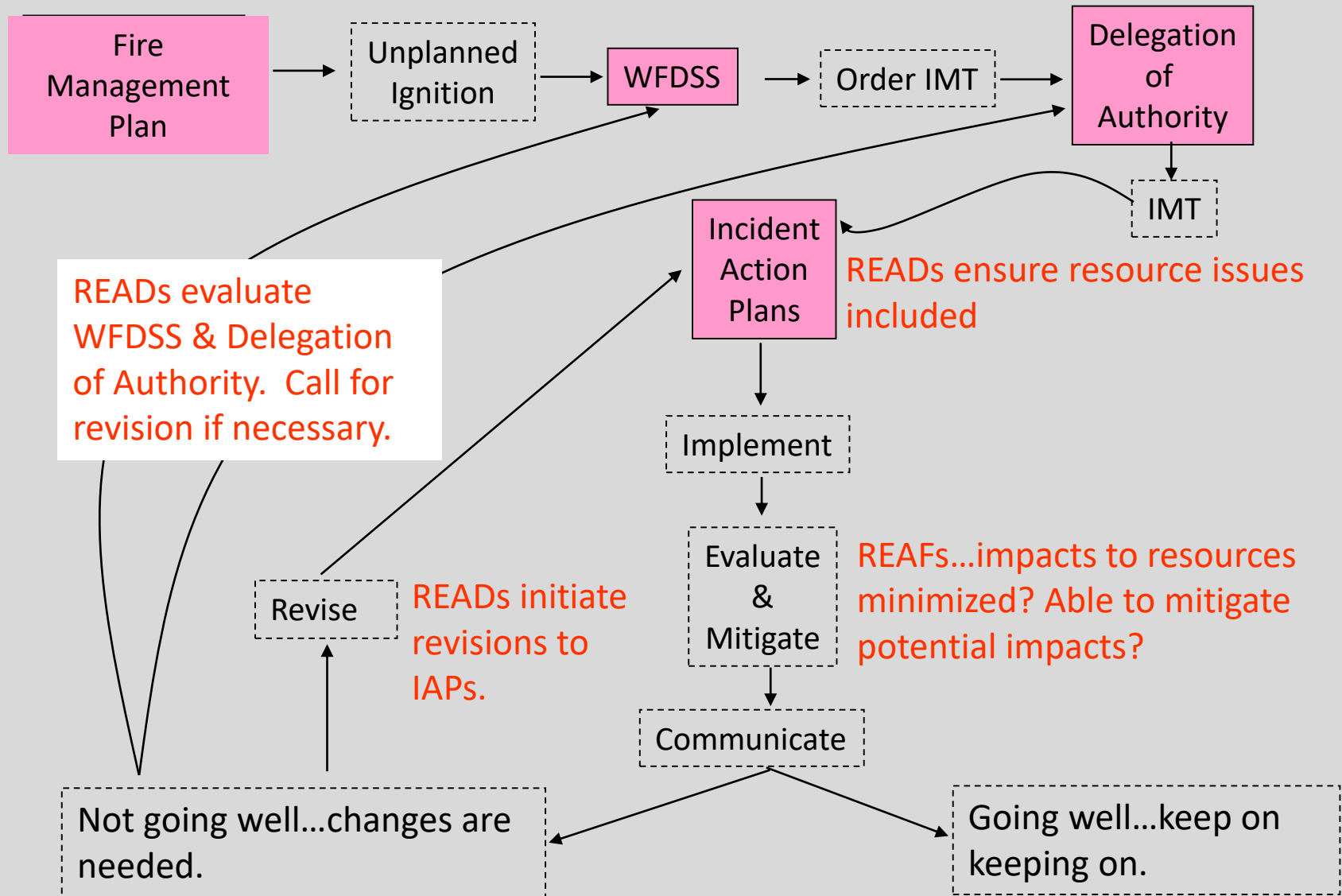
# DAY 2, 1730: READ Organization



----- Lines of communication

———— Lines of supervision

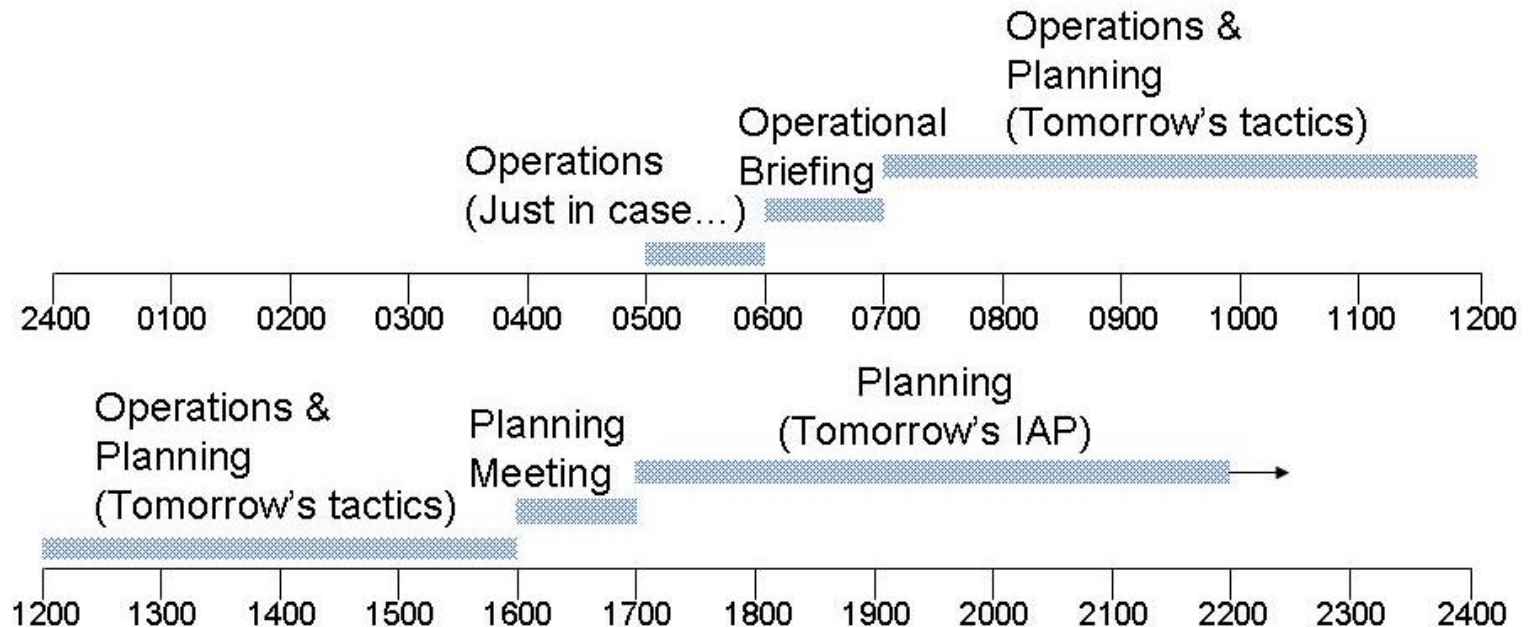
# READ Adaptive Management Cycle





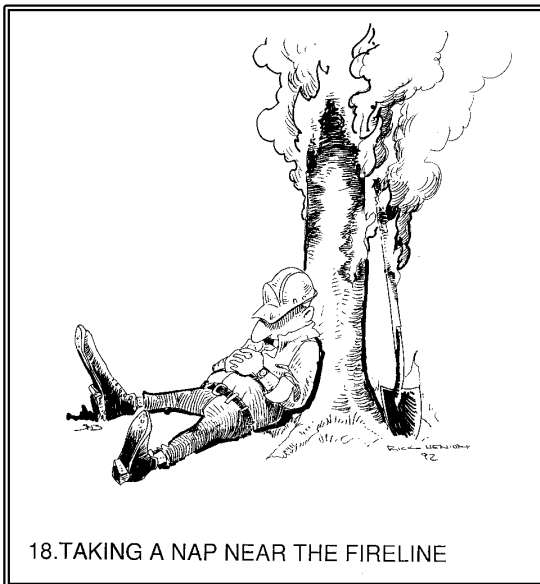
# DAY 2, 1800: READ Assignments

- Cedar–Lead READ
  - Meetings
  - Briefings
  - Planning

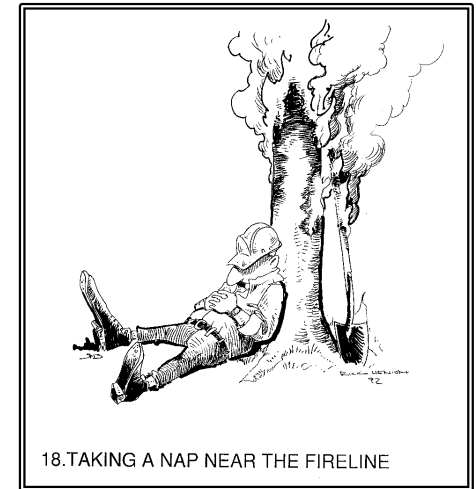
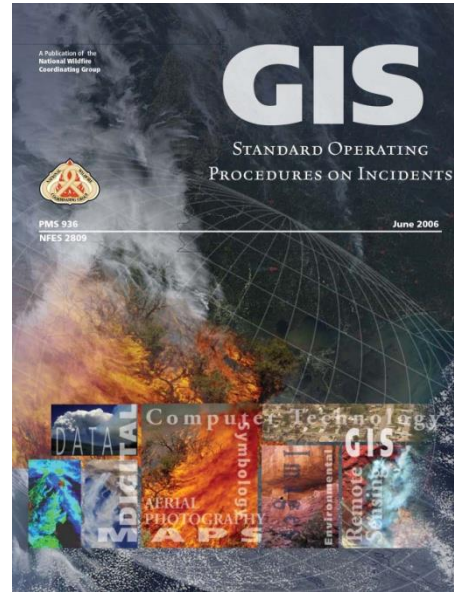


# DAY 2, 1800: READ Assignments cont.

- Marti- Deputy READ
  - Documentation...archiving, To-Do Lists.
  - Research for resource advising, suppression damage repair, BAER, BAR, etc.
  - Covering for Cedar



# DAY 2, 1800: READ Assignments cont.

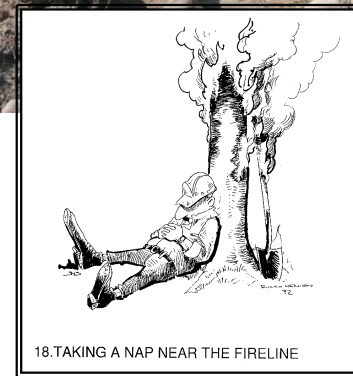


- Kent-GISS
  - Acquiring, managing and producing spatial data/products for natural and cultural resource maps, suppression damage repair, BAER, BAR, etc.
  - Works closely with IMT's Geographic Information System Specialists (GISS)
  - May do some fireline work as well...data acquisition



# DAY 2, 1800: REAF Assignments

- Assigned by divisions
- Need-based...put subject-matter experts in appropriate locations
- Promote ownership
  - Know the ground
  - Know the issues
  - Know the people
- Pair-up for safety and increased effectiveness



18. TAKING A NAP NEAR THE FIRELINE

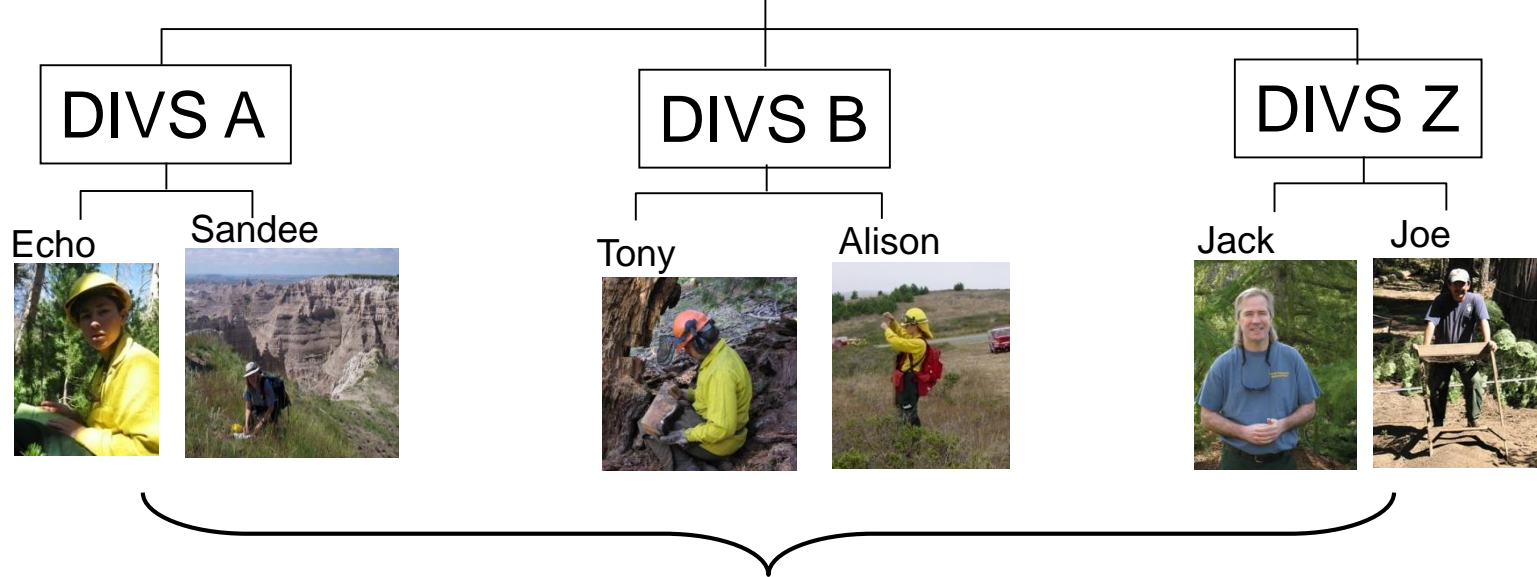
# DAY 2, 1800: REAF Assignments cont.



Jun

- Floating between Divisions
- Trouble-shooter, mediator, counselor, etc.
- Point of contact for Cedar to/from REAFs & DIVS

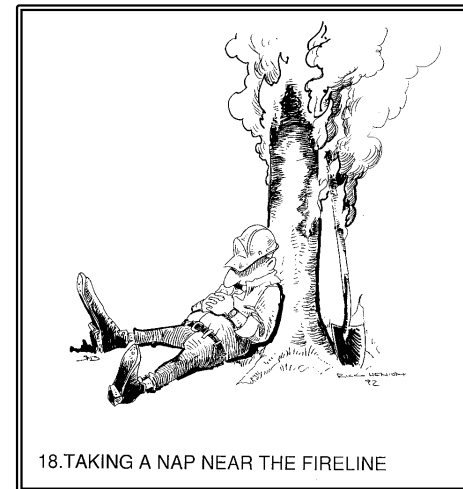
# OPERATIONS SECTION CHIEF



Jun



“The Floater”





# DAY 2, 1800: REAF Assignments

MIST and proper food storage on all

DIV A= Initiate cabin protection measures;  
sensitive watershed; owl habitat; weeds

DIV B= Minimize impacts to vegetation in  
cultural landscape; sensitive watershed; owl  
habitat; weeds

DIV Z= Archeological and Tribal values in  
Beaver River watershed to the north; sensitive  
watershed; weeds

What questions would/should you anticipate?

# DAY 2, 1900: REAF Evening Tasks

- Dinner
- Ready line and camping gear
- Final coordination for tomorrow
- BS-ing
- As much sleep as possible



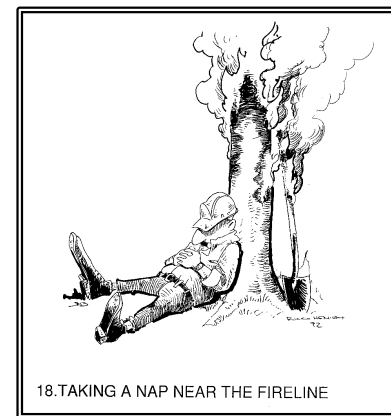
# DAY 2, 1900: Cedar's To-Do List

- Additions to IAP...2000 deadline
- Meet up with Food Unit Leader re: bears
- ICP weed issues
- Checklist for tomorrow's briefing
- Consultation/compliance...cultural resources
- Call Rich



# DAY 2, 1905: IAP Additions

- Special instructions by Division
  - MIST and proper food storage on all
  - No retardant drops in critical areas
  - DIV A= Initiate cabin protection measures
  - DIV B= Cultural landscape
  - DIV Z= Sensitive cultural sites
- REAF assignments (ICS-215 form)



# IAP Additions cont.

## Division Assignments (ICS-215)

OPERATIONAL PLANNING WORKSHEET																		1. INCIDENT NAME		2. DATE PREPARED		3. OPERATIONAL PERIOD (DATE/TIME)	
4. DIVISION OR OTHER LOCATION	5. WORK ASSIGNMENTS	6. RESOURCES BY TYPE (SHOW STRIKE TEAM AS ST)																7. REPORTING LOCATION	8. REQUESTED ARRIVAL TIME				
		RESOURCE																					
		TYPE																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED																					
		REQ																					
		HAVE																					
		NEED	</																				

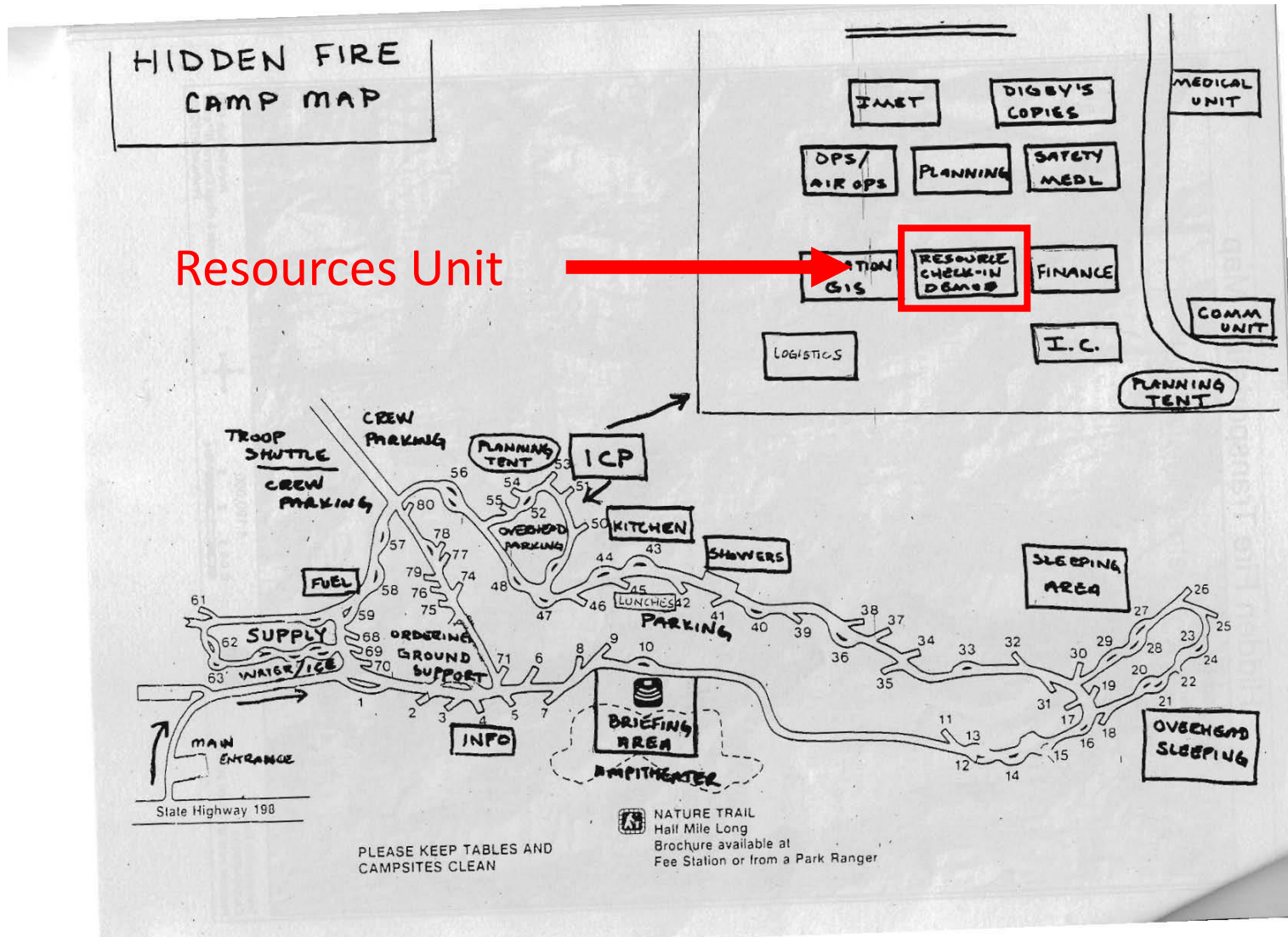
# IAP Additions cont.

- READ IAP Message
  - MIST guidelines
  - Bear recommendations





# DAY 2, 1950: IAP Additions cont.



# DAY 2, 2000: Cedar's To-Do List

- ~~• Additions to IAP...2000 deadline~~
- Meet up with Food Unit Leader re: bears
- ICP weed issues
- Checklist for tomorrow's briefing
- Consultation/compliance...cultural
- Call Rich

# DAY 2, 2010: Food Unit Leader

- We need adequate bear boxes for the three spike camps
  - FUDL: Does the park have any, how many, and how big?
- I call contact in park Maintenance...only three and quite small. Better to go through adjacent USFS unit.
- FUDL is already dealing with them. Will place bear box order.



# DAY 2, 2030: Cedar's To-Do List

- ~~• Additions to IAP...2000 deadline~~
- ~~• Meet up with FUDL re: bears~~
- ICP weed issues
- Checklist for tomorrow's briefing
- Consultation/compliance...cultural resources  
Call Rich

# DAY 2, 2030: ICP & Weeds

- Issues:
  - Seed sources at ICP
  - Seeds transported by ordered resources...arriving from across the western United States



Spotted knapweed,  
Montana

Yellow  
Star Thistle,  
E. Oregon



Common  
Crupina,  
Washington



*Euphorbia terracina*,  
Southern California



Bufflegrass,  
Arizona





# DAY 2, 2040: ICP & Weeds cont.

- Check park Resource Advisor Guide:

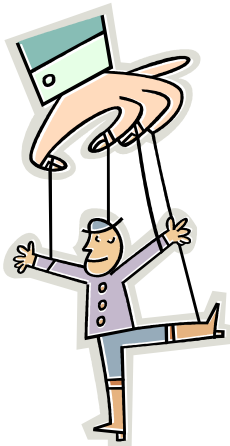
“Before entering the park:

- all equipment should be pressure or steam-washed to remove contaminated soil, seeds or plant propagules.
- boots and personal field equipment should be inspected for contaminated soil, seeds and plant propagules. “



# DAY 2, 2050: ICP & Weeds cont.

- Check with Marti, Alison and Tony
  - Vehicle cleaning requirements pretty burdensome (what about park vehicles going to and from ICP everyday?)
  - Recommend all non-local vehicles entering park for the first time be cleaned at park weed wash station



- Announce at morning briefing
- Hand out sketch map of location
- Have Jun set up directional sign

## DAY 2, 2115: ICP and Weeds cont.

- What about personnel and equipment being airlifted from helibase?
  - Good “bottleneck” to stop dispersal
  - Tarps for sling loads...could be safety issue. Need to consult with Air Ops.
  - Cleaning station for crews and their personal equipment...tarp, brushes, disposal equipment. Need people to man station.
- Cedar calls park Invasives Specialist. Two or three Bio Techs could help...will call in morning to inform about availability and interest.



# DAY 2, 2130: Cedar's To-Do List

- ~~• Additions to IAP...2000 deadline~~
- ~~• Meet up with FUDL re: bears~~
- ~~• ICP weed issues~~
- Checklist for tomorrow's morning briefing
- Consultation/compliance...cultural resources
- Call Rich

# DAY 2, 2145: Morning Briefing Checklist

- Introduce myself...point out that REAFs are experts on resource issues. They are here to help.
- Big issues:
  - Limiting the spread of weed seed
  - Bears
  - Cabin on DIV A
  - This is a park...all resources protected by law
- IAP Attachments
  - Park's MIST Guidelines
  - Recommendations for dealing with bears

# DAY 2, 2150: Call Rich

- He wants to know a lot of stuff
  - Give me a size up of the fire!
  - Are there post-fire threats to life and property?
  - What are the values at risk?
  - What is the Incident Management organization?
  - What type of REAF/READ resources do you have on the fire?



# DAY 2, 2300: Cedar's To-Do List

- ~~• Additions to IAP...2000 deadline~~
- ~~• Meet up with FUDL re. bears~~
- ~~• ICP weed issues~~
- ~~• Checklist for tomorrow's briefing~~
  - Consultation/compliance...cultural resources
- ~~• Call Rich~~

# DAY 2, 2305: Tomorrow's To-Do List

- Bear boxes
- Weed people
- Consultation/compliance



# DAY 2, 2315: Unit Log (ICS-214)

<b>1. Incident Name</b> Grouse Fire		<b>2. Operational Period (Date/Time)</b> From: 0700 (XX/XX) To: 2400 (XX/XX)		<b>INDIVIDUAL LOG</b> ICS 214a-OS	
<b>3. Individual Name</b> Cedar Drake		<b>4. ICS Section</b> Planning		<b>5. Assignment/Location</b> Overhead READ-ICP	
<b>6. Activity Log</b>					Page 1 of 1
Time	Major Events				
0700	Departed duty station				
1000	Arrived at Incident; briefed with READ				
1200	Attended Operations planning meeting				
1600	Attended Planning meeting				
1700	Briefed incoming READs, prepared IAP documentation, planned for next operational shift				
<b>7. Prepared by:</b> Cedar Drake		<b>Date/Time</b> XX/XX/XXXX 2400			
INDIVIDUAL LOG		June 2000		ICS 214a-OS	



# DAY 2, 2330: Time

- No more than 16 hrs./shift without IC approval
- Show break for meals

[illegible]









# DAY 3, 0500: WAY Too Early

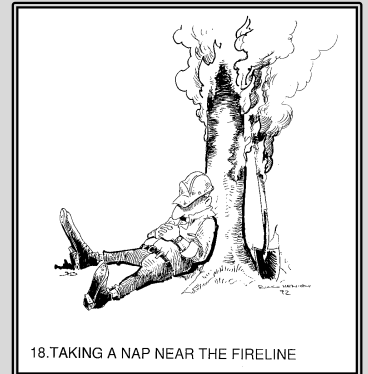
- Drag carcass out of bed and get dressed
- Get to Operations trailer for pre-operational briefing at 0515
- At 0545 meet up with AREP to discuss today's plan
- Review notes for 0600 morning briefing

# DAY 3, 0600: Morning Briefing



# Operational Briefings

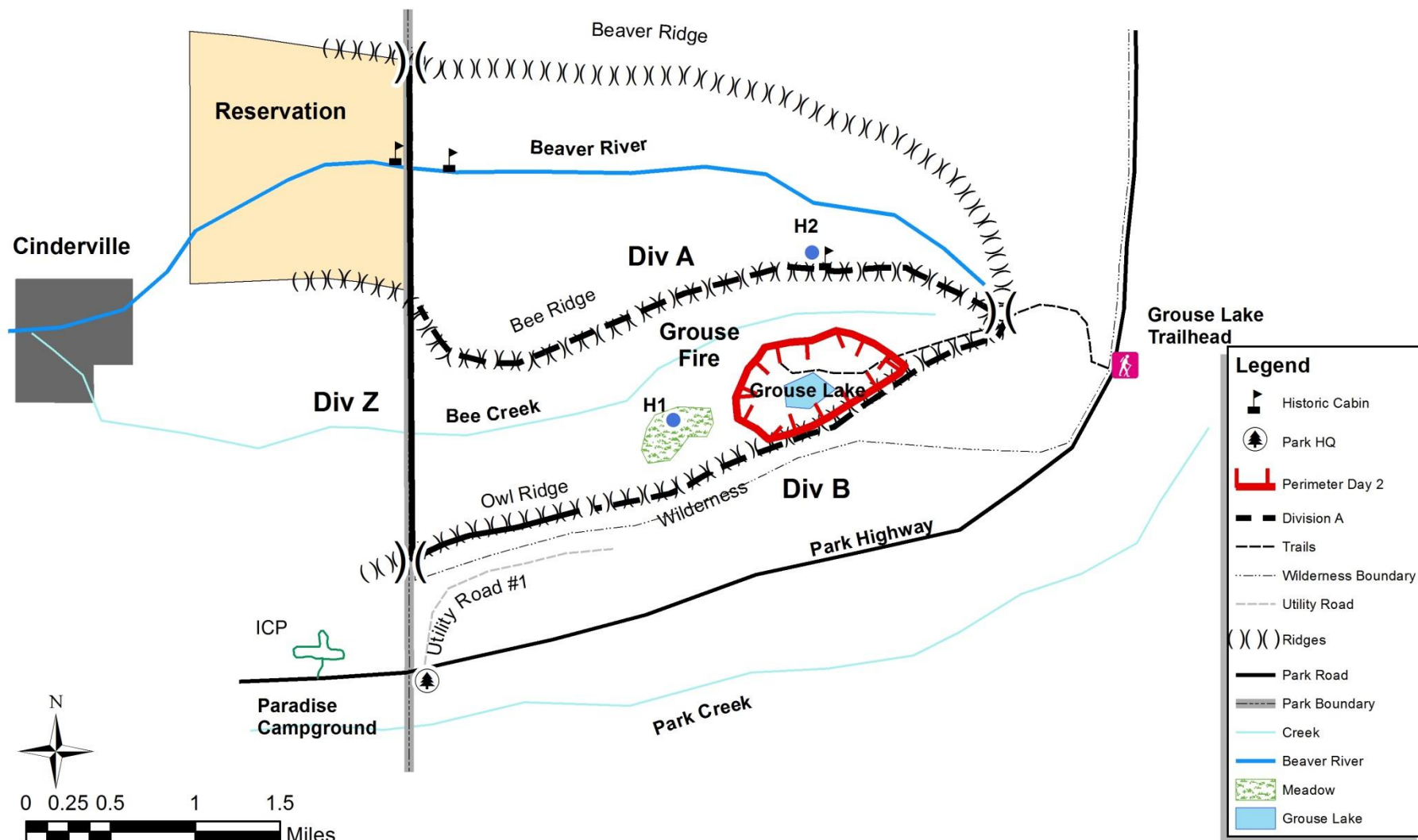
- Present the daily IAP and assignments to supervisors for the next operational period
- Attended by Command and General Staff, Branch Directors, Division Supervisors, Task Force/Strike Team Leaders, AREP, READs
- Facilitated by the Planning Section Chief, set schedule, READ message toward the end
- Intimidating...remember **BRIEF**-ing







# Grouse Fire Situation: Day 2, 1600



# DAY 3, 0645: Morning Briefing

- Issues:
  - DIV A= Cabin protection kit is in place. Echo, Sandee and Jun will be there to assist.
  - DIV B= Tony and Alison will be at the park wash station...directions in DIV breakout; provide guidance for vegetation thinning in the cultural landscape
  - DIV Z= Joe and Jack will be present on the fireline
- IAP attachments, park resources protected
- “Fun Fact” of the Day



# DAY 3, 0700: Division Break-Out





# DAY 3, 0700: Division Break-Out

- Assigned REAFs attach to respective Divisions
  - Jun floats among Divisions as needed
- Directions to park weed wash station provided to DIVS for DIV B
  - REAFs or THSPs will meet vehicles there

# DAY 3, 0730: Lead READ Tasks

- To-Do's
  - Bear Boxes
  - Weed stuff...speak to Air Ops, waiting for call
  - Consultation/compliance issues



# DAY 3, 0745: Bear Boxes

- Speak to FUDL...bear boxes have arrived and are at helibase.
- Check them out...several issues
  - Actually tool boxes...will they work?
  - Confusing to lock...not all have instructions
- Call Bear Management Specialist at park; need to have her take a look...please bring digital images of bear damage





# Spike Camp Food Storage and Sanitation



# DAY 3, 0745: Bear Boxes cont.

- Problem: Bear boxes that are tough to use won't be used
- Call Marti...have her come down to helispot.
- Task her with making locking instruction sheets that can be affixed to outer lid of boxes...include images of bear damage





# DAY 3, 0830: REAFs Head Out

- REAFs depart for the fireline...DIV Z REAFs drive up with crews. DIV B REAFs already headed up to park wash station.
- DIV A REAFs and Jun fly out of helibase with crews...cabin protection kit was dropped at cabin yesterday evening.





# Cabin Protection Kit

## CABIN PROTECTION KIT

### Box # 1

Mark Three bag w/ inventory list

100' ½" nylon rope

200' nylon cord

absorbent pad

2 staple hammers

2 staple guns

8 boxes staples (match hammer/gun)

1 hammer

25' tape measure

2 1 ½" gated wyes

wrecking bar

total box wt. 80 lbs.

### Box # 2

5 1 ½"-1" reducers

8 1"- ¾" reducers

2 1" caps

1 2"-1 ½" reducers

2 1 ½" gated wyes

4 1" gated wyes

4 ¾" gated wyes

6 2" stands w/ inline T

4 1 ½" inline T

2 1" inline T

4 ¾" valve shutoffs

1 1 ½" foot valve

1 2" foot valve

1 forester nozzle

1 1 ½" lexxon nozzle

1 1" lexxon nozzle

3 25'-50' 1 ½" hose

1 roll masking tape

2 rolls duct tape

total box wt. 75 lbs.

### Box # 3

1500' ¾" hose, synthetic

4 ¾" low roof sprinklers

6 1 ½" inline ground sprinklers

6 2"X 1 ½" inline ground sprinklers

3 extra sprinkler heads

1 crescent wrench

1 lb. 16d duplex nails

1 lb. 5d duplex nails

total box wt. 80 lbs.

### Misc. loose items:

2 400' quicklay packs of 1 ½" hose

1 600' quicklay pack of 1 ½" hose

2 Mark Three pumps

2 Mark Three fuel cans 20:1 mix w/  
fuel lines

4 Gerry cans 20:1 mix w\ nozzle

1 folding ladder

1 1 ½" suction hose

1 2" suction hose

1 Climbing harness

Rolls of shelter wrap- as needed per site

<sup>1</sup>Source: ClevelandLaminatingCorp

2909 East 79<sup>th</sup> St.

Cleveland OH

216-883-8484

888-883-8484

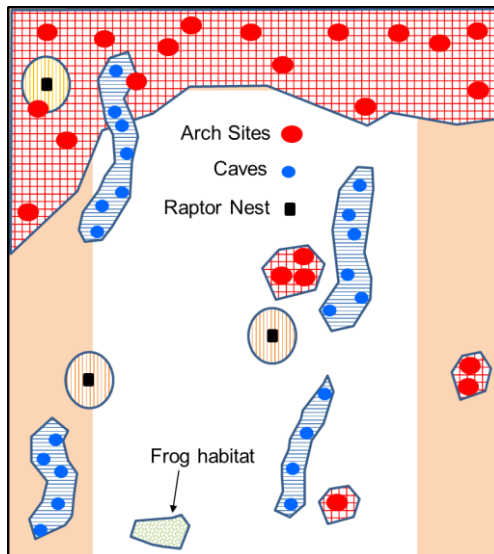
FAX 216-883-4251

[www.clevelandlam.com](http://www.clevelandlam.com)



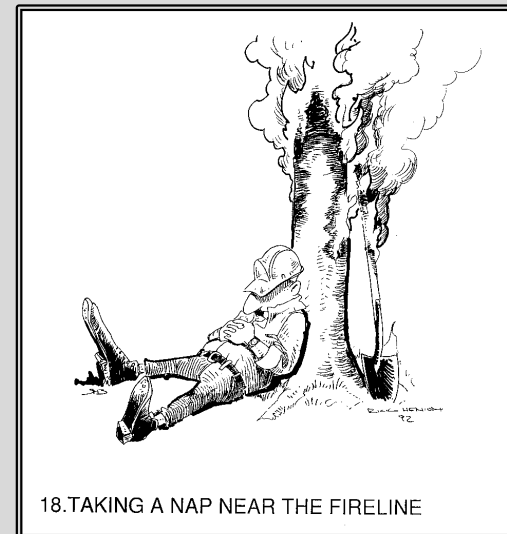
# DAY 3, 0830: REAFs To Do List

- Meet line personnel
- Walk line. Is it what we expected?
- Document existing impacts
- Implement IAP



# Being an Effective REAF

- Let the job come to you
- Know the issues and the potential solutions
- Know what is negotiable (and what is not)
- Lend a helping hand
- Document



18. TAKING A NAP NEAR THE FIRELINE



# DAY 3, 0830: Lead READ Tasks

- Call from Marti...bear tech says boxes are good to go. Inform FDUL, tell DIV A and B REAFs about instructions
- To-Do's:
  - ~~– Bear boxes~~
  - Weed stuff
  - Consultation/compliance issues

## DAY 3, 0845: Weeds

- Talk with Air Ops...says tarp would be acceptable for sling loads. Will speak to helibase manager about setting up.
- Park Invasives Specialist calls...three people available beginning this morning. None have red cards, none are in IROC
- Get names and contact info. Place order through Ordering. Have them come down to the ICP and tie in with me

# General Message: ICS-213 form

GENERAL MESSAGE		
TO: Resource Ordering	POSITION:	
FROM: Nelson Siefkin	POSITION: READ	
SUBJECT: Name Request Orders for THSP	DATE: XX/XX/XXXX	TIME: 0900
MESSAGE:		
<p>Please order the following individuals as THSP's:</p> <ol style="list-style-type: none"><li>1. Jane Doe (NPS) start XX/XX/XXXX at 1000</li><li>2. John Doe (NPS) start XX/XX/XXXX at 1000</li><li>3. Joe Doe (NPS) start XX/XX/XXXX at 1000</li></ol> <p>None of these individuals are in ROSS. All work for the park and can be contacted through park dispatch (XXX.XXX.XXXX).</p> <p>Please feel free to contact me if you have any questions (510.507.7357)</p>		
SIGNATURE: /S/ Nelson Siefkin	POSITION: READ	
REPLY:		
DATE:	TIME:	SIGNATURE/POSITION:



Crews staging at helibase



DAY 3, 1000

Tarp for sling loads





# Preventing Weed Seed Dispersal on Cargo









# DAY 3, 1005: Lead READ Tasks

- To-Do's:
  - ~~Bear boxes~~
  - ~~Weed stuff~~
  - Consultation/compliance issues



# Consultation/Compliance

Federal laws and policies protecting natural and cultural resources still apply during wildfire response.


All READs need to work diligently to take all efforts to prevent impacts to sensitive resources.

However....

sometimes it's unavoidable that stuff gets broken

# Consultation/Compliance

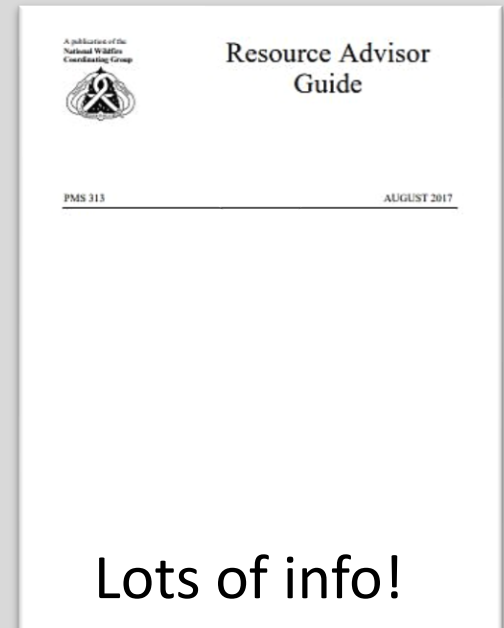
## READ Response:

1. Secure/stabilize the site: Prevent additional damage
2. Document the impact
3. Communicate the impact to:
  - IMT: to prevent additional damage to the site or reoccurring damage elsewhere on the fire
  - Agency Administrator/ Agency Representative
  -  • **Local Resource Specialist:** notification to appropriate officials
    - NHPA = SHPO/THPO
    - ESA = USFWS
    - Etc.



# Consultation/Compliance

- Section 106 of the National Historic Preservation Act
- Archeological Resources Protection Act
- Native American Graves Protection and Repatriation Act
- Section 7 of the Endangered Species Act
- Clean Air Act
- Clean Water Act
- Migratory Bird Treaty Act
- Wilderness Act
- Wild and Scenic Rivers Act
- And many many more



# Endangered Species Act: Section 7

- Emergency ***consultation*** required for all T&E species; ***conference*** for proposed species; ***none*** for candidate species (agency may require)



Consultation is required for suppression actions....not fire effects

# Section 106: National Historic Preservation Act

Authority for emergency situations found in 800.12...respond to immediate threats to life and property

- Programmatic approach encouraged
- Contact applicable State/Tribal Historic Preservation Officers (SHPO/THPO) & other interested parties ASAP; seven days to comment
- Applies only to undertakings implemented within 30 days of emergency declaration



## **Phone Log for Cultural Resource Impact Associated with Fire Suppression**

**July 10, 2004**

**Cedar Drake**

**Lead Resource Advisor: Grouse Fire**

**Wayne Johnson**

**Big Fire National Park Archeologist**

**912.212.2121**

I am writing to inform you of suppression related impact to archeological site CA-SHA-2004. Impact was sustained to the surface site during active fire suppression activities on the evening of July 8, 2004. A bulldozer constructing fireline in the area, inadvertently tracked over the location and deposited approximately 2 ft. of side cast material onto the site. Incident resource advisors have documented the site through notes and photos. The impacted area has been flagged off to prevent future disturbance and operational fire personnel managing the area have been informed to avoid any future activities which may further destabilize the site. Photos, read observations, and a hand drawn sketch of the area are attached to this message.

If needed, a field visit to the disturbed site can be arranged once conditions are safe to enter the area.

Please feel free to contact me with any additional questions.

Cedar Drake

Grouse Fire Lead Resource Advisor

360.123.456.7890

## Installing Fish Screens on Pumps



## Wilderness Wildfire Guidelines

### **Role of Wildfire**

Recognize that, in fire dependent wilderness ecosystems, fire is necessary in order to preserve the natural conditions of wilderness as mandated by law and agency policy.

To the extent possible, allow fire to play its natural role in the ecological processes of wilderness.

### **Wildfire Management Activities**

Minimize the unnatural effects of fire suppression activities in wilderness.

Conduct all fire management activities within wilderness in a manner compatible with overall wilderness management objectives. Give preference to using methods and equipment that cause the least:

- Degradation of wilderness character

- Alteration to the wilderness landscape

- Disturbance of the land surface or degradation of habitat or water quality

- Disturbance to visitor solitude

- Need for subsequent restoration or mitigation

- Complete Minimum Requirements Analysis'

### **Wildfire Retardant Use** (Pre-Season Planning)

- Is retardant allowed?

- If used, what are the criteria (type, color, etc.) for use?

- Will temporary retardant dip sites be allowed?

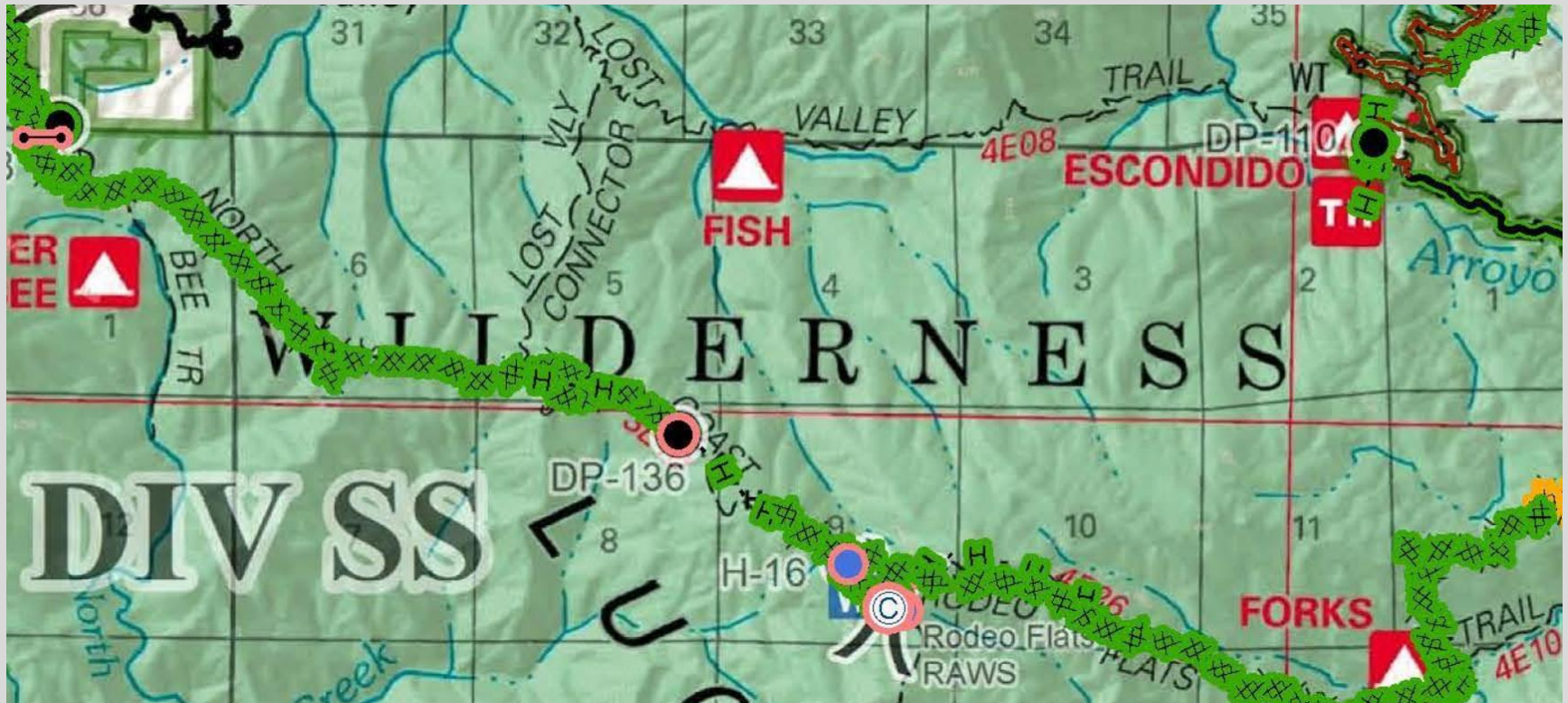
### **Wildfire Suppression Tactics** (Both Pre-Season Planning and during the incident)

- Minimum Impact Strategy and Tactics (MIST, see Appendix J)

- Others







# Wilderness “Minimum Requirement Analysis”

- Exceptions can be made to the Wilderness Act (e.g., use of motorized equipment) for the administration of an area as wilderness...includes fire management
- Minimum tool or requirement concept
- Incorporate as part of compliance documentation for Fire Management Plan

# Document, Document, Document

## Appendix D

### Wilderness Minimum Requirement Analysis for the 2005 Fire Management Plan for Death Valley National Park

#### Contents:

1.0 Designated Wilderness in Death Valley National Park .....	2
2.0 Minimum Requirement Concept .....	2
3.0 Minimum Requirement Analysis .....	3
3.1 Alternatives Considered .....	3
3.2 Wilderness Considerations in the Development of the Proposed Action .....	4
3.3 Comparison of Alternatives .....	4
3.4 Proposed Action and Mitigation Measures .....	5
3.5 Proposed Use of Mechanical or Motorized Equipment or Transport .....	6
3.6 Minimum Requirement Analysis for Planned Activities .....	7
Text Box: Carhart MRDG Worksheet .....	8
4.0 Minimum Requirement Determination .....	12
4.1 Findings .....	12
4.2 Determinations .....	12
5.0 Decision .....	13
5.1 Selection of Alternative .....	13
5.2 Justification .....	13
5.3 Approval .....	13
6.0 References .....	14



ARTHUR CARHART NATIONAL WILDERNESS TRAINING CENTER

## MINIMUM REQUIREMENTS DECISION GUIDE WORKSHEETS

Please refer to the accompanying MRDG [instructions](#) for filling out this guide. The spaces in the worksheets will expand as necessary as you enter your response.

**Step 1: Determine if any administrative action is necessary.**

**Description:** Briefly describe the situation that may prompt action.

To determine if administrative action is necessary, answer the questions listed in A - F on the following pages.

#### A. Describe Valid Existing Rights or Special Provisions of Wilderness Legislation

Are there valid existing rights or is there a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws) that allows consideration of action involving Section 4(c) uses? Cite law and section.

Yes: ☐ No: ☐ Not Applicable: ☐

Explain:

#### B. Describe Requirements of Other Legislation

Do other laws require action?

Yes: ☐ No: ☐ Not Applicable: ☐

Explain:

#### C. Describe Other Guidance

Does taking action conform to and implement relevant standards and guidelines and direction contained in agency policy, unit and wilderness management plans, species recovery plans, tribal government agreements, state and local government and interagency agreements?

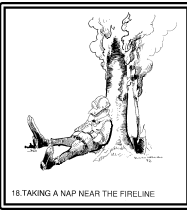
Yes: ☐ No: ☐ Not Applicable: ☐



# DAY 3, 1200: Meet with Kent and Marti

- Marti says weed cleaning station at helibase is working well...crews are being very cooperative
- Need to start scoping short and long-term resource impacts...Kent will create a spatial database to document sites which may have been impacted and need to be checked
- e.g., Weeds
  - Locations to be surveyed and/or treated for weeds— ICP, park wash station, sampling points between ICP and park

# Tracking Bodies



Name	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
Jun K.	X	X	X						
Echo D.	X	X	X						
Cedar D.	--	Travel	X						
Marti W.	--	Travel	X						
Jack O.	--	Travel	X						
Joe S.	--	Travel	X						
Sandee D.	--	Travel	X						
Alison F.	--	Travel	X						
Tony C.	--	Travel	X						
Kent VW.	--	Travel	X						

## DAY 3, 1400: Tomorrow's Tactics

- As anticipated, there are problems with slop-overs in NW corner of DIV A...retardant drops aren't holding well
- OSCs inquire about backing off to northern boundary of Beaver River watershed
- AREP calls the Line officer...he is adamant that Beaver River watershed should remain unburned if at all possible



# DAY 3, 1430: Jun Calls

“What’s the deal with all of the retardant?”



# DAY 3, 1500: Tomorrow's Tactics

- OSC returns from overflight...retardant drop has landed midslope on the southern aspect of Bee Creek watershed, just east of park boundary...it is windy, hot and very smoky.
- Cedar reluctantly contacts the park Aquatic Biologist...he's very displeased..."I'll be down there in 15 minutes."

# DAY 3, 1515: Damage Control

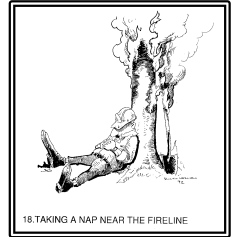
- “How could that happen?”
- “It’s very complex operationally; more drops mean more chances for mistakes...”





# DAY 3, 1515: Damage Control cont.

- “What are you going to do about it?”
- “Nothing we can do right now.”
  - Need to file report of retardant drop on the USFS website
  - Fire suppression account can be used to perform post-fire monitoring...prepare a proposal and budget



18. TAKING A NAP NEAR THE FIRELINE



# DAY 3, 1530: Update from Jun

- He is on DIV A...things are going well
- Cabin is protected; bear boxes in place
- He saw drop into Bee Creek
- Any issues that need to be addressed before, during planning meeting?
  - No. He will be checking in with other REAFs at 1800; will call me back at 1900

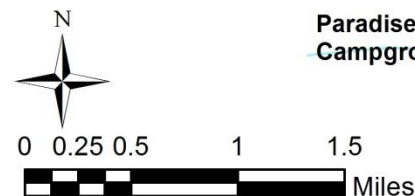
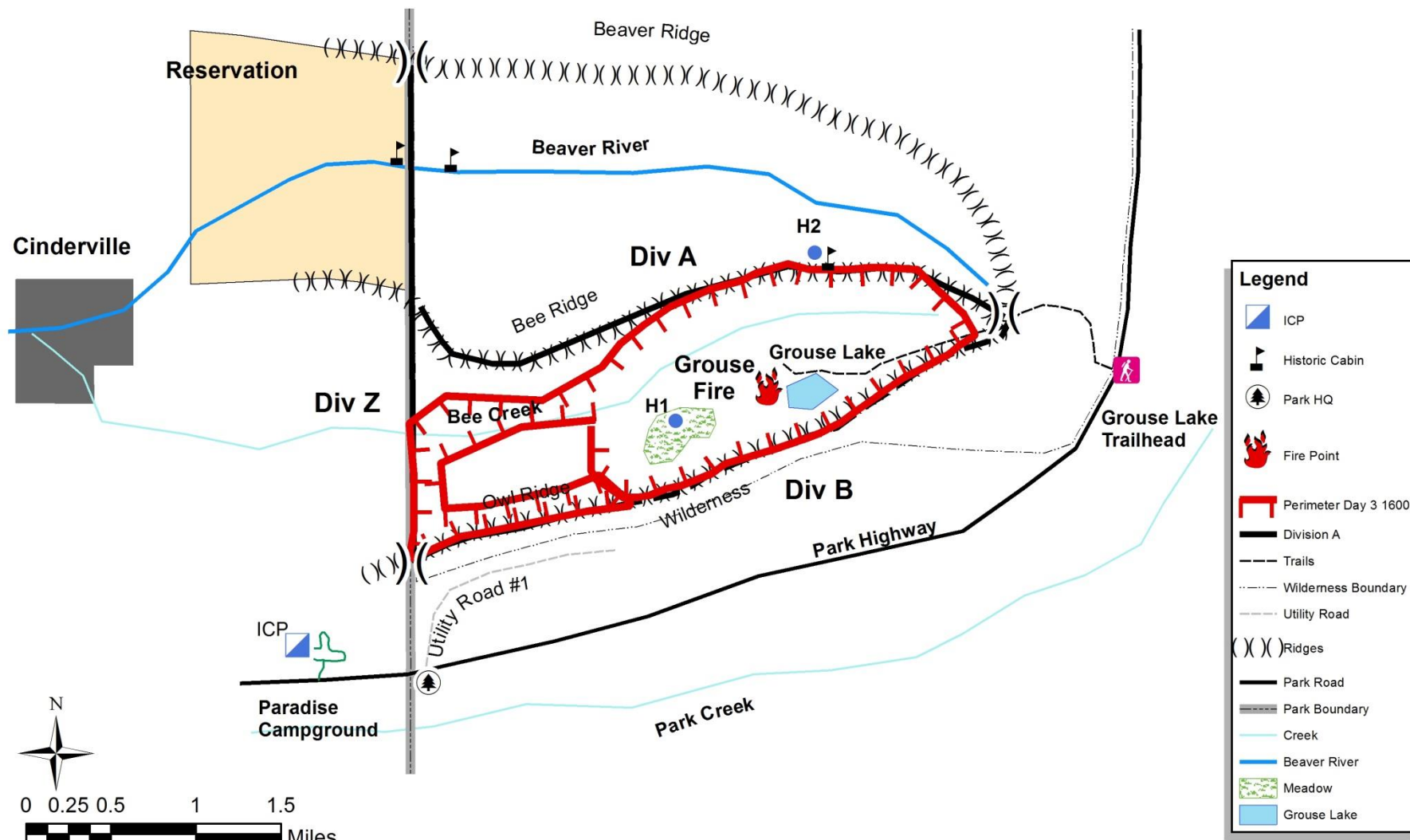
# DAY 3, 1600: Planning Meeting







# Grouse Fire Situation: Day 3, 1600



# DAY 3, 1650: Planning Meeting: READ Input

- By all indications, things are going well on the fireline
- Cabin on DIV A is protected, bear boxes are in place
- Additional updates will come in at 1900
- “We support the plan”

# DAY 3, 1700: Lead READ Tasks

- IAP additions due at 2000
- Talk to Jun at 1900
- Prepare bear posters
- Call Rich
- Have Marti and Kent prepare REAF “Care Packages”
- Morning briefing checklist
- Unit log
- Time



## DAY 3, 1900: Jun calls back

- Div A: Crews did excellent job wrapping cabin. Some “bone piles”...will have crews disperse.
- Div B: Problems with trash and not using bear boxes...DIVS blew off REAFs. Jun will head over there tomorrow. Otherwise going OK.
- Div Z: Observed some sport falling, site furniture, etc. No impacts to arch sites.



**Boredom Busting**



**Fireline Blogs**



**Fireline Furniture**





## DAY 3, 1900: Jun calls back CONT.

- J: “Do you want us to try to map retardant drops?”
- C: “No. We will try to get information from operations. Otherwise, we can do a fly over after the fire. Tomorrow could get interesting. Let me know if you need anything.”
- J: “Copy. I will give you a call at some point tomorrow. Quick story from Alison and Tony about a shot crew setting up camp in a meadow...”

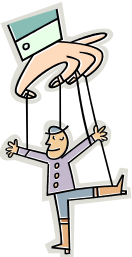


## DAY 3, 1930: IAP Additions

- Double check IAP for REAF division assignments
- Include special instructions by division: Cabin on Div A, MIST and food storage on all
- Ensure MIST guidelines and bear recommendations are in READ IAP insert

# DAY 3, 1945: IAP Additions CONT.

- Marti put together a READ IAP message educating about weeds:
  - All personnel leaving ICP for fire should inspect and clean clothing and personal equipment
  - All vehicles assigned to Div B should clean vehicle at park weed wash station upon first entry into park
  - Personnel flying into Div A will first go through a weed cleaning station at helibase
  - Thank you. Your assistance and cooperation are greatly appreciated.



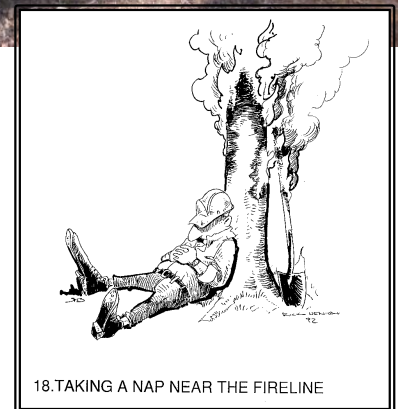
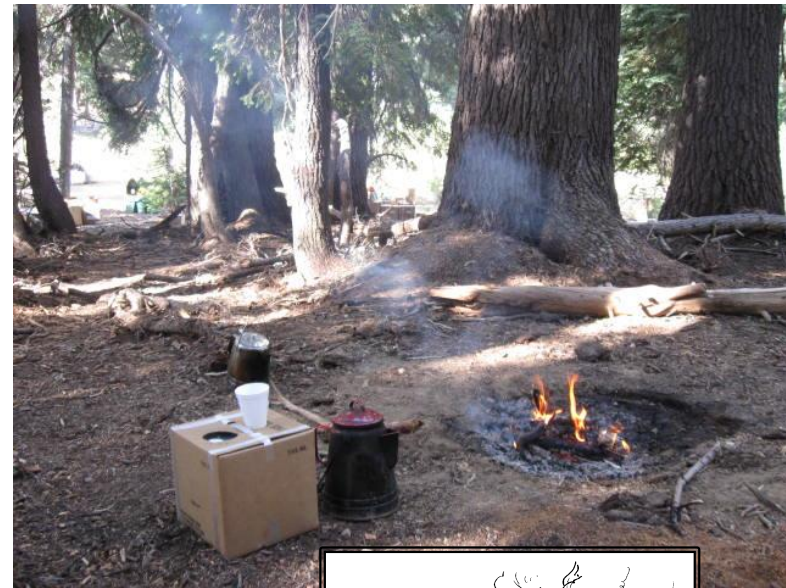
# DAY 3, 2000: Overhead READ Tasks

- ~~• IAP additions due at 2000~~
- ~~• Talk to Jun at 1900~~
- Prepare bear posters
- Call Rich
- Have Marti and Kent prepare REAF “Care Packages”
- Ops briefing checklist
- Unit log
- Time



# DAY 3, 2030: REAFs in the evening...

- Answering philosophical questions about latrine placement...
- Smokejumpers and REAFs on the fireline-like hanging out with Elvis.
- Help organize food & trash in camp.
- Organize paperwork, data
- Finding that common ground-strong coffee, where you went to school.



18. TAKING A NAP NEAR THE FIRELINE

# Criteria for Hazard pay from Incident Business Management Handbook (pg. 10-25)

- This does not include personnel engaged in logistical support, service, and non-suppression activities, e.g., media tours to the fireline, incident personnel driving to the fire to observe activities, drivers delivering tools or personnel (Appendix B - hazard/environmental pay matrix).

- Hazard pay for flying activities is related to the use of the aircraft, not the work of the occupants. If the flight is undertaken under unusual and adverse conditions which threaten or severely limit control of the aircraft, then hazard pay is warranted. Hazard pay is not authorized for situations such as flying passengers from a work center to a location to fix equipment when there are no adverse conditions that threaten or severely limit the aircraft.

[illegible]

# Criteria for Hazard pay from Incident Business Management Handbook (pg. 10-26)

- Groundwork Beneath Hovering Helicopter – Participating in ground operations to attach an external load to a helicopter hovering just overhead.
- Work in rough and remote terrain – Working on cliffs, narrow ledges, or near vertical mountainous slopes where a loss of footing would result in serious injury or death, or when working in areas where there is danger of rock falls or avalanches.

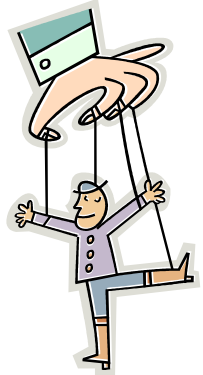
Burned Area Emergency Response (assessment or implementation) does not meet the definition of firefighting for hazard pay eligibility; however, hazard pay criteria listed above may apply.

[illegible]



# DAY 3, 2100: Bear Poster

Talk to Public Information Officer about placing a poster of bear damage at the information board...



# DAY 3: 2130, Bear Poster cont.

Make smaller versions to send out to fireline



# DAY 3, 2200: Ready REAF Care Packages

- GPS units, cameras, batteries; bear posters; IAPs (if available); maps, MIST guidelines, etc.
- Place in small Action Packer clearly labeled READs
- Will go out tomorrow...in person to DIV Z REAFs, hand to DIVS for DIV B REAFs, fly out to DIV A REAFs

## DAY 3, 2230: Call Rich

- Still in a holding pattern...if fire stays in Bee Creek, we can handle it. If it goes into Beaver River, we'll need some help.
- Tomorrow is the make or break day....good chance of catching this thing
- We'll probably need help from some hydrology/geology specialists... we're good on every other issue.



# DAY 3, 2300: READ Tasks

- IAP additions due at 2000
- Talk to Jun at 1900
- Prepare bear posters
- Call Rich
- Have Marti and Kent prepare READ “Care Packages”
- Ops briefing checklist
- Unit log
- Time



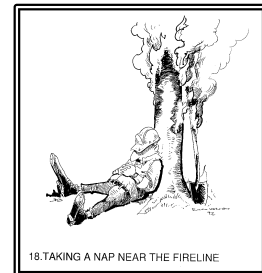


It's a tough job...



# DAY 4, 0500: Rise and Shine in the ICP

- Hit the Operations trailer for pre-Ops briefing at 0515
- Catch IC before briefing begins...let him know about bear problems on Div B. Jun will try to handle today. Please emphasize importance during briefing...it's a safety issue



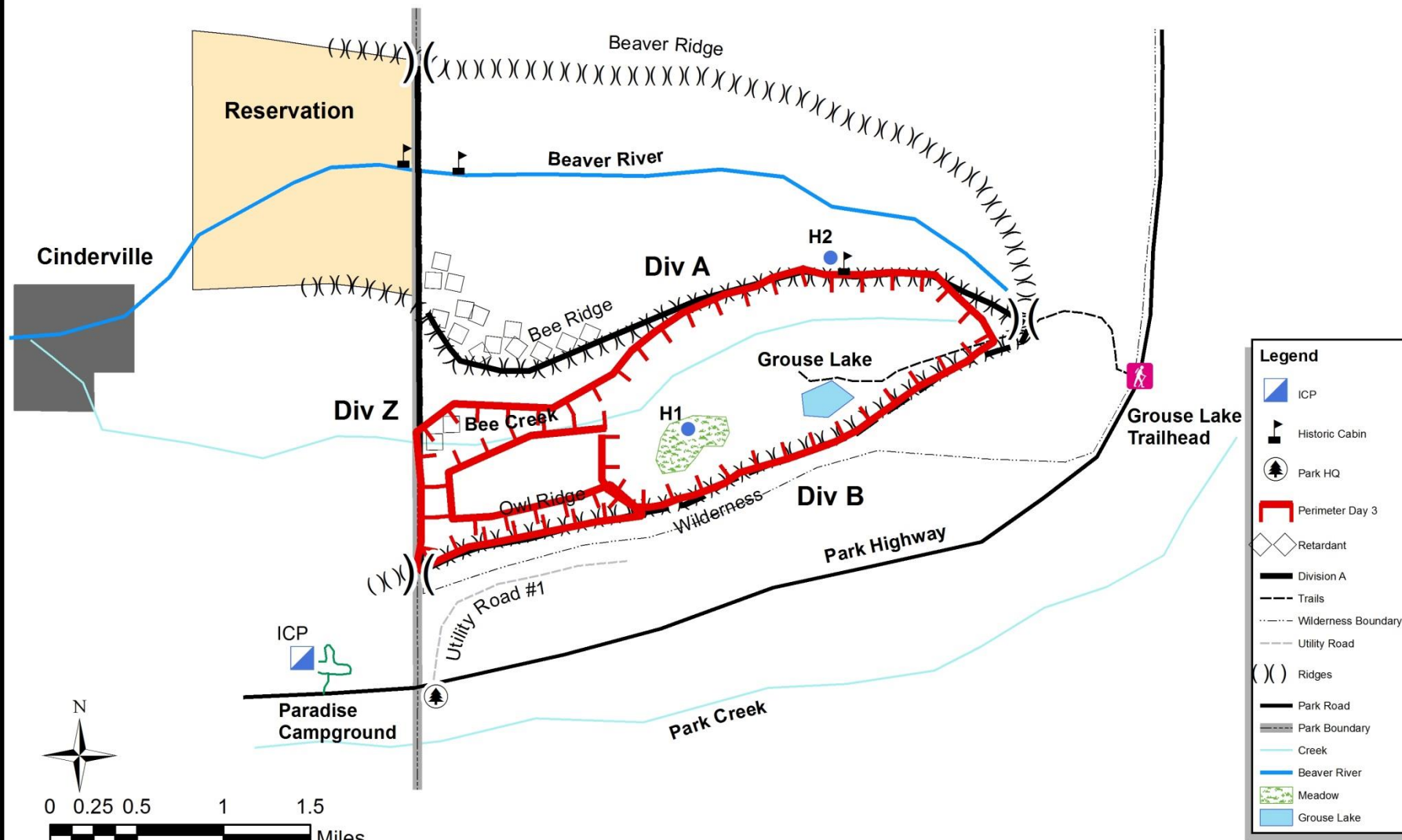


# Day 4, 0600 Operational Briefing





# Grouse Fire Situation: Day 4, 0600



# DAY 4, 0645: Morning Briefing\*

- Huge thanks to crews for cooperation and assistance
- Review REAFs assigned by Division
  - they are here to help answer your questions
- Things went really well yesterday...cabin on DIV A is protected, few resource issues
- Weeds: New vehicles on DIV B must go through weed wash before entering park...see map in your IAP...personnel for Div A please clean for weeds at helibase...thanks for cooperation

\* Who wants to give this briefing?

# DAY 4, 0645: Morning Briefing cont.

- Bears: Be sure to use bear boxes, carefully manage trash, check out cool pictures on info board and bear boxes
- Fire is in designated Wilderness...employ MIST techniques...refer to the MIST list in your IAP
- IAP attachments, protected park resources
- “Fun Fact” of the day





# DAY 4, 0730: Fireline Briefings

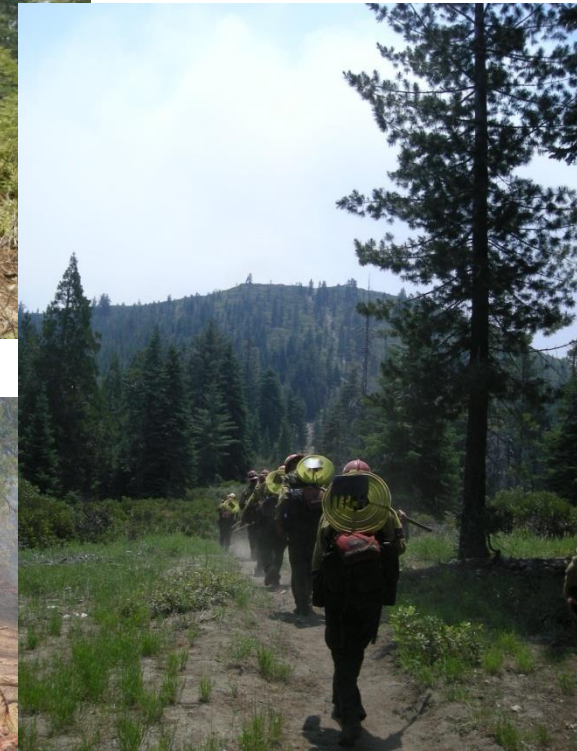


# DAY 4, 0730: Cedar Goes to Helibase

- Make sure weed cleaning station is in place and functioning
- Remind Kent to periodically check in with helibase for returned REAF boxes
- Marti is writing up a narrative of developments to date, outstanding impacts, and major events and decisions for the incident READ report

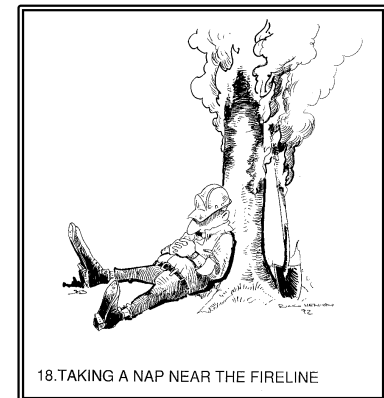


# DAY 4, 0800: Up and Running on the Fireline



# DAY 4, 1000: Why we get the Big Bucks

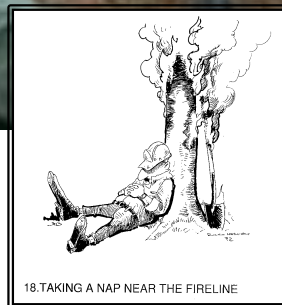
- AREP comes from the Operations trailer...the IC and OPs are really ticked off about the inability to allow fire in the Beaver River watershed
- The Park Superintendent has headed off to the Cinderville Rotary lunch and won't be back until late afternoon



18. TAKING A NAP NEAR THE FIRELINE

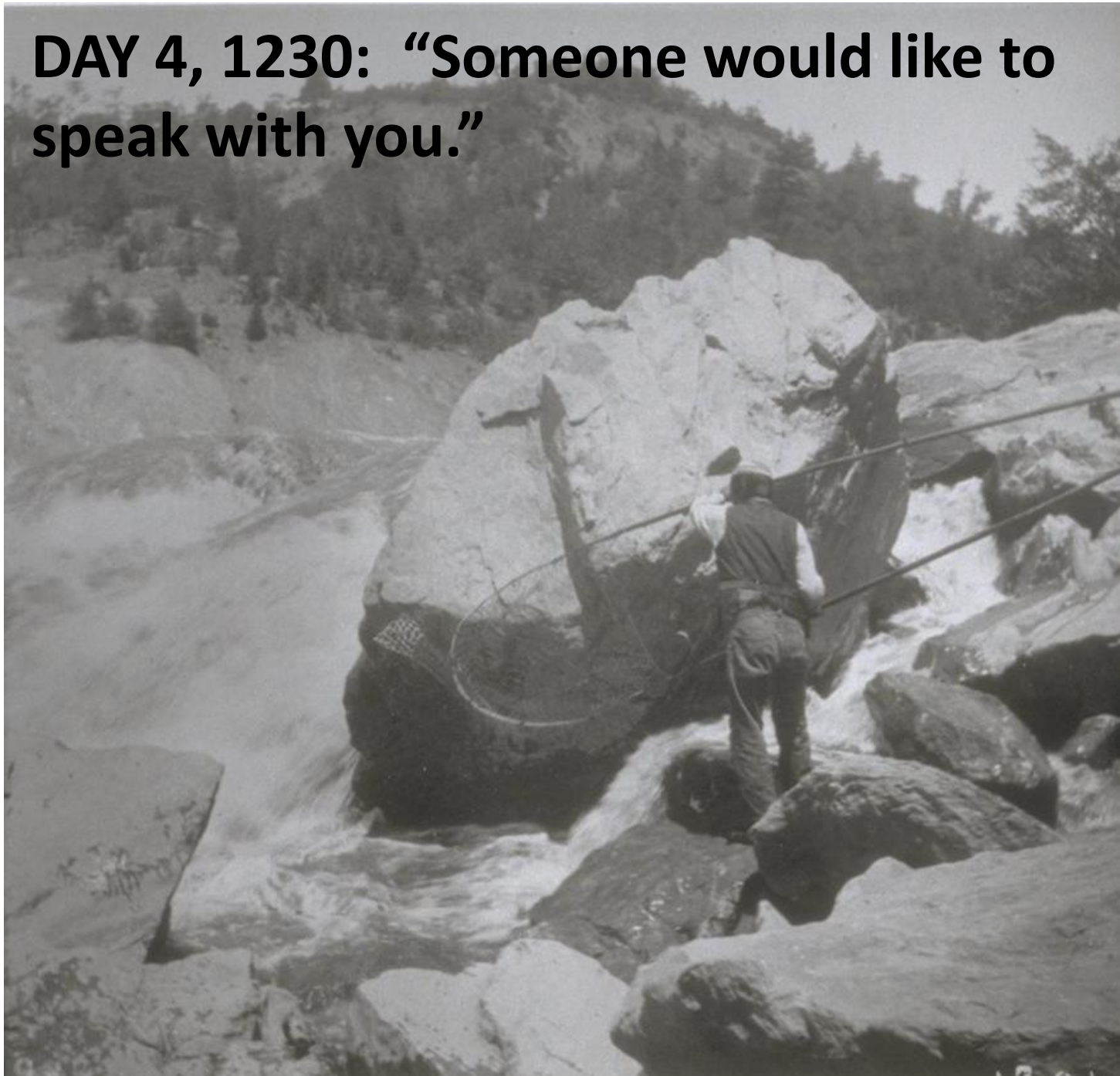


# DAY 4, 1200: Hurry Up and Wait....



18. TAKING A NAP NEAR THE FIRELINE

**DAY 4, 1230: “Someone would like to speak with you.”**





# DAY 4, 1330: Window of Opportunity

Cedar and AREP go to Cinderville to meet with the AA.  
Need to re-think overall strategy...



# DAY 4, 1400: Making the Pitch...

- AREP explains the situation to the Park Superintendent...consider allowing fire in the Beaver River watershed for numerous reasons:
  - Operational Concerns: firefighter safety while holding containment lines
  - Resource Concerns: high probability of inadvertent fire-retardant application near river, wilderness character considerations, other watershed values



# DAY 4, 1400: Making the Pitch...

- The Park Superintendent has questions:
  - Will post-fire watershed impacts impair the municipal water supply?
  - Will necessary post-fire treatments compromise wilderness values, natural/ cultural resources, etc.?
  - Can we fund retardant contamination monitoring and mitigation using fire funds?

# DAY 4, 1415: Closing the Deal...

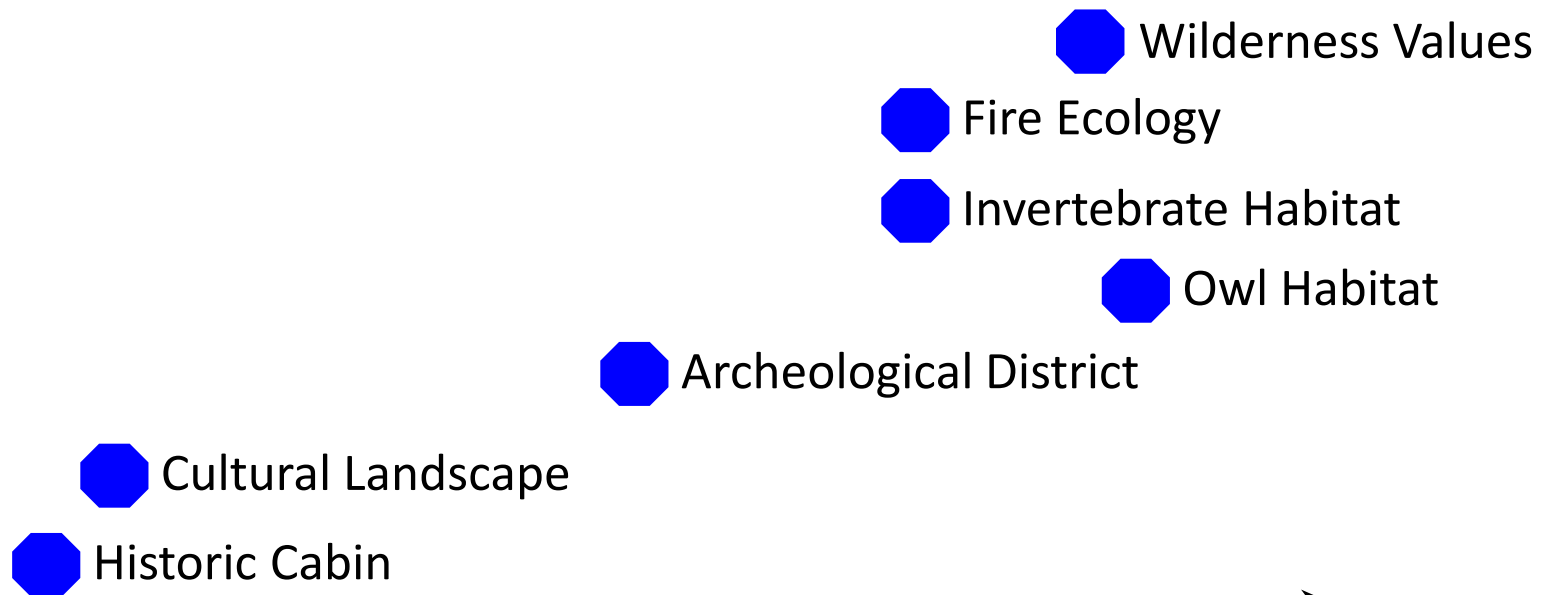
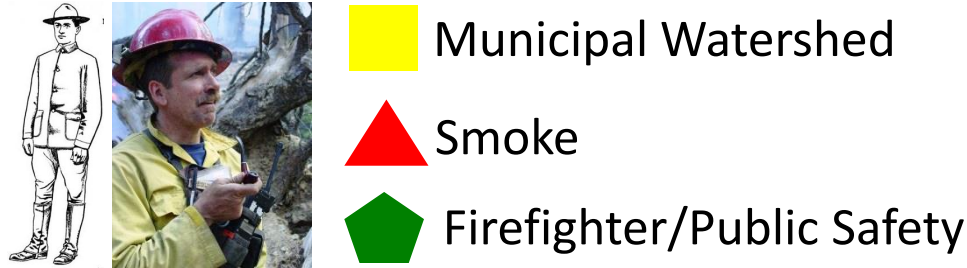
- The AA and AREP mull it over and realize:
  - We can bring in the necessary BAER personnel and model likely post-fire response given fuels, geology, projected fire behavior, etc.
  - The BAER team can prescribe the necessary treatments to minimize post-fire impacts...they have lots of experience working with sensitive resources.
  - We will request that firing operations in the watershed be conducted to produce low severity fire intensity and effects
  - We will request fire funding to monitor areas affected by retardant drops.

# DAY 4, 1445: Optimism Returns

- The AA & AREP agree to allow the fire to progress into the Beaver River drainage under moderated conditions.
- Park Superintendent, AREP and Cedar head to ICP to pitch the idea to the IMT where it is warmly received
- Ops wants to fly the fire...Cedar offers up Jun's services...will give him a call
- OPs: Let's postpone the 1600 planning meeting until 1730 to get more information



# Grouse Fire Response...values at risk

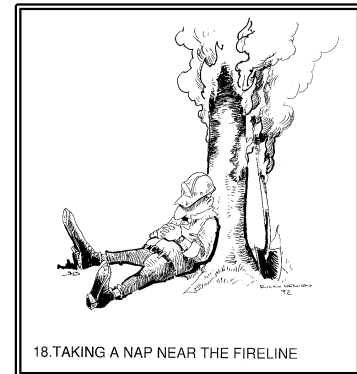


Full, aggressive  
perimeter control

Monitoring

# DAY 4, 1450: Change O' Plans

- Break the news to Jun that things are changing...
  - Jun: “What in the hell is going on back there? Why are we abandoning the existing impacts?”
- Fill him in on the details and appease him with a helicopter ride with the OSC to scout line and spike camp locations on Div Y



18. TAKING A NAP NEAR THE FIRELINE

# DAY 4, 1450: Change O' Plans CONT.

- C: “Things going OK otherwise?”
- J: “Yeah, pretty well. Just got back from meeting with DIVS B about bear stuff. There was a crew from Southern California that didn't realize bear boxes were for their safety...things are better now.”

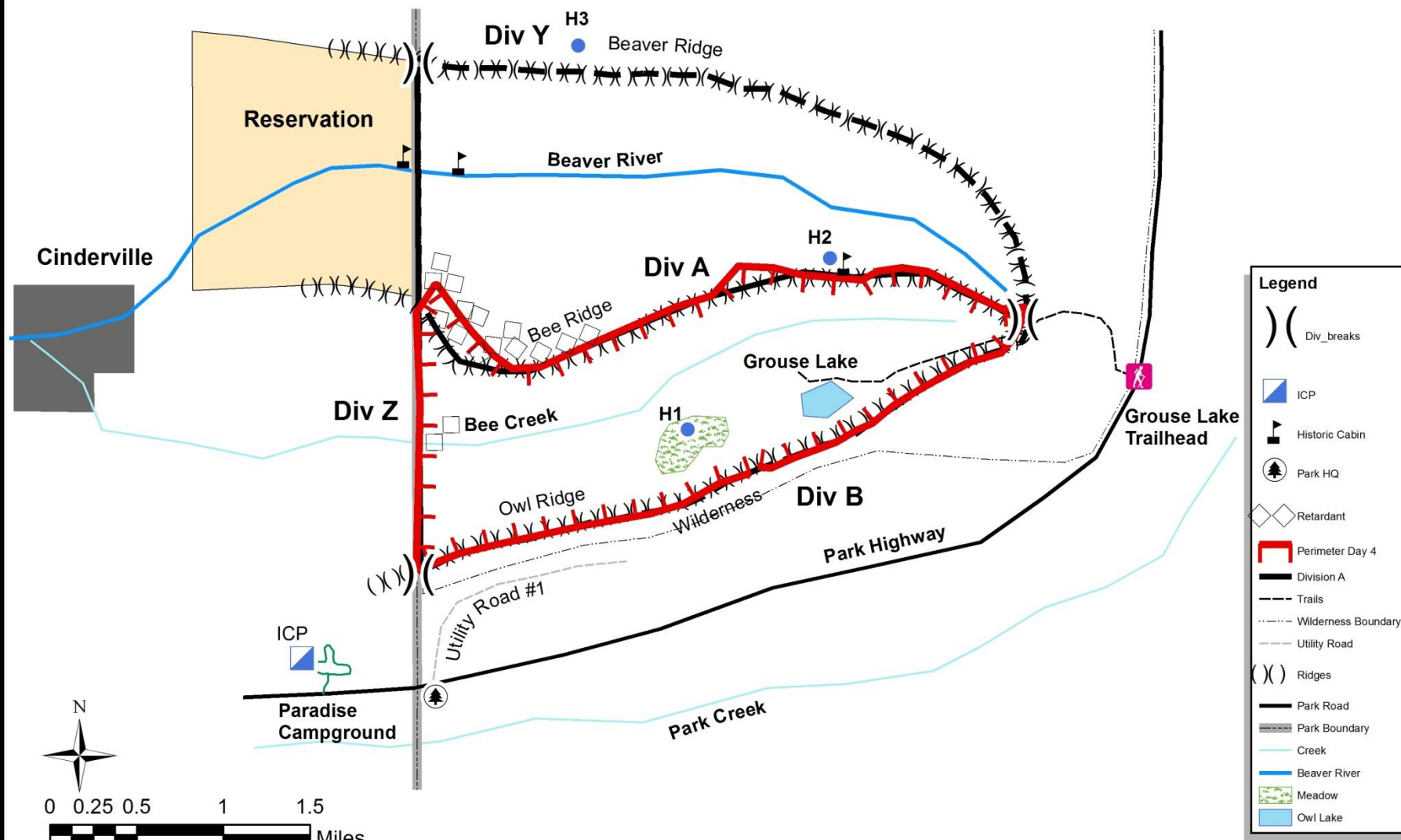
# DAY 4, 1730: Planning Meeting







# Grouse Fire Situation: Day 4, 1730



# Day 4, 1815: Planning Meeting: READ Input

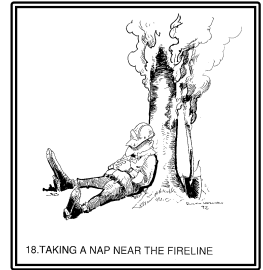
- Things are going well on DIV A, B and Z...bear issue has been resolved
- Jun flew the fire and helped identify spike camps and helispot locations on DIV Y.
- Jun and I will work with other REAFs to get personnel on DIV Y and expansion of DIV Z. We have a lot of cultural resource concerns up there.
- Our REAFs are ready to address mop-up and suppression damage repair on DIV B. Suppression Repair Plan should be ready for review by tomorrow.
- I'm already in conversation with the National BAER Coordinator about setting up the BAER team on the fire.
- How will we deal with the cabin on DIV A?
- "We support the plan."

# DAY 4, 1840: Call Rich

- Update him on the fire conditions and change of strategy.
- Feels like we are exceeding our span of control relative to BAER issues...we'll need your help
- Best case scenario?
- You and Brian Rasmussen come down here ASAP

# DAY 4, 1855: ... and then the National BAER Coordinator Says ...

- Do you need a satellite image?
- Is there a helicopter to do recon?
- Will there be facilities to work at?
- How large of a BAER organization do you think we will need?
- What type of specialists do we need?
- Can you put in an order into dispatch for Brian and I?
- Do the IC and Superintendent know we are coming?





# Post-Fire Response

	<b>Suppression Activity Damage Repair</b>	<b>BAER</b>	<b>BAR</b>	<b>Restoration</b>
<b>Objective:</b>	Repair suppression damages	Protect life, property & critical resources	Repair fire-caused damages	Long Term Ecosystem Restoration
<b>Damage due to:</b>	Suppression activities	Post-fire events	Fire	Fire
<b>Urgency:</b>	Before incident closeout	1-12 months	1-5 years	5+ years
<b>Responsibility:</b>	Incident commander	Agency Administrator	Agency Administrator	Agency Administrator
<b>Funding type:</b>	Suppression (fire)	Emergency Stabilization	Rehabilitation	Regular program

# DAY 4, 1910: Let's Talk Complexity

Rich calls back...he is uncomfortable

## NATIONAL INTERAGENCY BAER TEAM DISPATCH PRIORITIZATION CRITERIA EVALUATION

<i>Question</i>	<i>Criteria</i>	<i>Points</i>	
1	Does ordering land unit have the ability (lacking needed resources) to produce their own BAER Plan with local or regional assistance? If yes, instruct the unit to undertake plan development. Stop here; there is no need to complete this table. If no, complete table below.	Yes/No	
2	Post-wildfire impacts pose immediate and significant threats to human life and property.	10	
Choose only 1	Post-wildfire impacts pose moderate threats to human life and property.	5	
	Post-wildfire impacts pose minor threats to human life and property.	1	
3	There are numerous emergency stabilization issues, wildfire damage assessments are difficult and require special skills not available at the local unit.	3	
Choose only 1	There are several emergency stabilization issues, wildfire damage assessments are difficult and require special skill not available at the local unit.	2	
	There are few emergency stabilization issues, wildfire damage assessments are routine and require some skills not available at the local unit.	1	
4	BAER planning will involve multiple Federal/Tribal/State jurisdictions.	3	
Choose only 1	BAER planning will involve 2 Federal/Tribal/State jurisdictions.	2	
	BAER planning will involve one DOI bureau.	1	
Total Points			

### Point Score

3-7  
8-11  
12-18

### Recommended Action

National Interagency BAER Team dispatch not appropriate at this level  
Consider using other local or regional resources  
Priority dispatch of National Interagency BAER Team

# BAER Teams



BAER Team  
Rattle Complex

BAER/BAR Team  
Flick Creek Fire



# DAY 4, 1922: Track Down Marti & Kent

- ICP READ Deadlines to meet & Stuff to Do
  - IAP additions...Add suppression repair guidelines. I will work out staffing issues when I speak with Jun
  - Place order for Rich and maybe Brian (Rich will call Marti)...turn in General Message to Ordering
  - Ready REAF “Care Packages”
  - Kent: Work with the SIT Unit to make maps of suppression damage repair needs for DIV A, B and southern portion of Z
  - Marti: Start preparing spatial data for incoming BAER Team
  - There may be more once I speak with Jun.



# DAY 4, 1930: Division Updates

- DIV A
  - J: No REAFs currently. Handline is done and all black to south. Do they want to ignite on north side of ridge? What about the cabin?
  - C: Ops said they want all personnel off of DIV A. Not sure about ignition. Is the cabin still adequately wrapped and sprinklers running?
  - J: Yeah, it will probably survive just fine. Suppression damage repair is pretty minimal and can wait for awhile.

# DAY 4, 1930: Division Updates CONT.

- DIV B
  - J: Things are really quiet. Doing some mop-up. What is the word from Ops?
  - C: Want to start suppression damage repair. There's handlines (including interior), spike camps, bone piles, stumps, and the utility road that need repair, right?
  - J: Yup. I'll need to get a look at the cultural sites and check the status of owl nests before they begin work though.
  - C: Can we break Tony or Alison free to work on another Division?

# DAY 4, 1930: Division Updates CONT.

- DIV Z
  - J: South half is quiet (mop-up), north half pretty much nuts.
  - C: Not seeing many suppression impacts?
  - J: No. Pretty much just limited to trash pick-up.
  - C: I'm guessing Joe and Jack are working the active part of the Division?
  - J: Yeah. And we can have Alison or Tony cover the cold half.

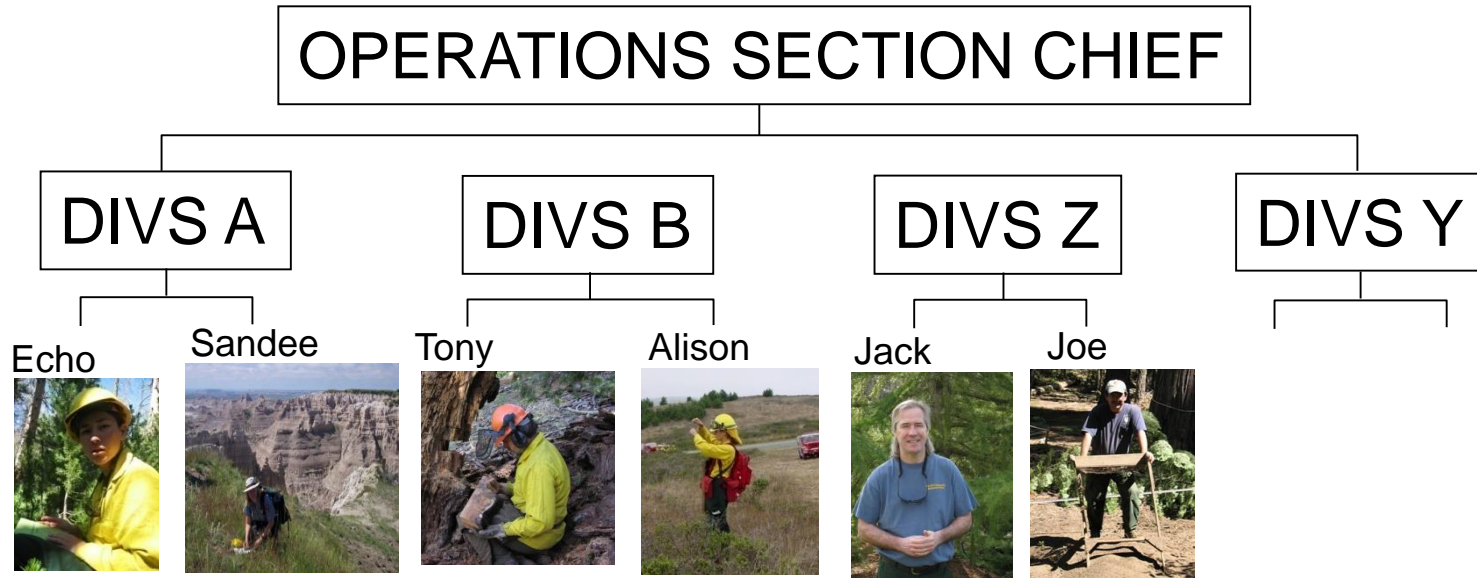
# DAY 4, 1930: Division Updates CONT.

- DIV Y
  - J: Handline is going in and black lining will follow that. I spoke with the DIVS about getting low severity fire effects. Sandee and Echo are starting on the west side of the DIV because of cultural resource concerns.
  - C: And Jack and Joe are working that portion of DIV Z within the Reservation and arch district?
  - J: Yeah, and I'll head over to DIV Y on the last shuttle tonight.
  - C: Sounds good. Be safe and let's talk in the morning.



# DAY 4, 2000: Changes to IAP

- Moving pieces on the fireline...



Jun



“The Floater”

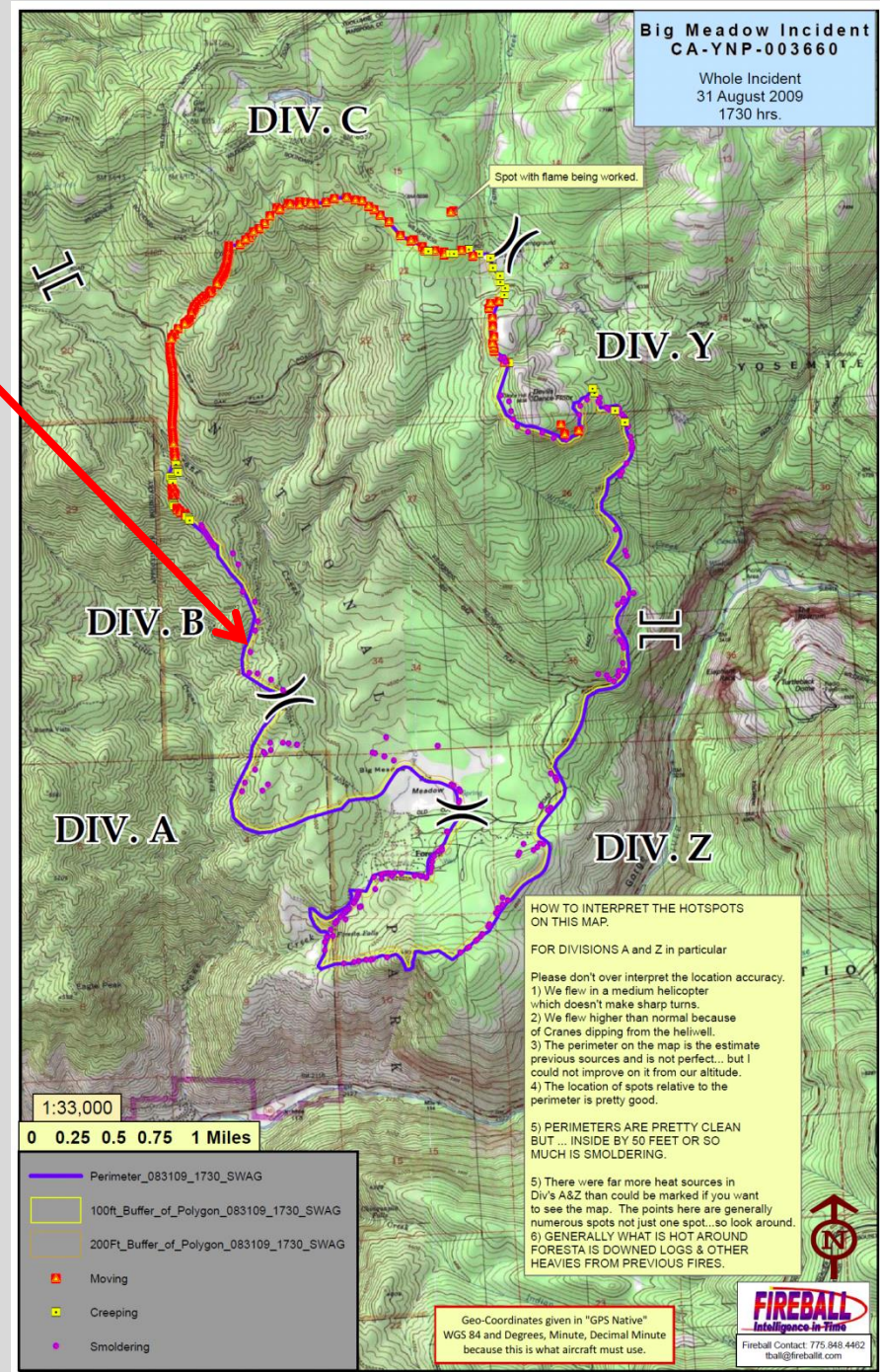
# DAY 4, 2030: Clarifying Directions

- Track down IC, Ops, PLSC to clarify what the new plan is.
- What are the mop up standards going to be?
- Provide draft Suppression Repair Plan to AREP and IC for review and approval.
- Discuss suppression damage repair needs on DIV B, south end of DIV.
- Work with SITL and GISS to ensure that Suppression Repair Map is accurate



Mop-up: Extinguishing or removing burning material near control lines, felling snags, and trenching logs to prevent rolling after an area has burned, to make a fire safe, or to reduce residual smoke

- NWCG Fireline Handbook





# Mop-up

- How deep is needed?
- Bone piling?
- Bucking and rolling
- Throwing of soil
- Hiding of saw cuts
- To waffle or not to waffle?





# Suppression Damage Repair



# Post-Fire Response

	Suppression Damage Repair	BAER	BAR	Restoration
<b>Objective:</b>	Repair suppression damages	Protect life, property & critical resources	Repair fire-caused damages	Long Term Ecosystem Restoration
<b>Damage due to:</b>	Suppression activities	Post-fire events	Fire	Fire
<b>Urgency:</b>	Before incident closeout	1-12 months	1-5 years	5+ years
<b>Responsibility:</b>	Incident commander	Agency Administrator	Agency Administrator	Agency Administrator
<b>Funding type:</b>	Suppression (fire)	Emergency Stabilization	Rehabilitation	Regular program

# Key Points: Suppression Repair

- IC is typically delegated responsibility for completion of suppression damage repair
- Usually performed immediately after fire containment
- Guided by standards approved by the home unit in the Suppression Repair Plan





# Suppression Repair Does Not Include:

- pre-existing damage unrelated to fire suppression
- effects of the fire rather than those of fire suppression





# Types of Suppression Damage

- Dozerlines
- Handlines
- Spike camps
- Staging areas
- Base camps
- Helispots and helibases
- Retardant bases and gel plants
- Water sites: dip, draft, and drop sites
- Damaged fences
- Windrowed roadside materials
- Roads
- Noxious Weeds (transported by incident resources)



# Suppression Repair Plan Components

- Repair standards
  - General treatment specifications
    - e.g. waterbar dimensions and frequency (slope)
  - Detailed specifications for unique sites and situations
- Clarification of who will be determining if suppression-related impacts have been repaired to the suppression repair plan standards

## Fire Suppression Repair Plan

# Ferguson Fire

CA-SNF-000745

July 28, 2018

Approved by: 	Date: <u>7/28/18</u>
JAY KURTZ, Incident Commander California Interagency Incident Management Team 4	
Approved by: 	Date: <u>7/28/18</u>
DEAN A. GOULD, Agency Administrator Sierra National Forest	
Approved by: 	Date: <u>7/28/18</u>
JASON KLUCK, Agency Administrator Stanislaus National Forest	
Approved by: 	Date: <u>7/28/18</u>
MIKE REYNOLDS, Agency Administrator Yosemite National Park	
Approved by:  <u>ALPD</u>	Date: <u>7/29/18</u>
For WILLIAM HAUGH, Agency Administrator BLM Motherlode Field Office	
Approved by:  <u>Billy See IL</u>	Date: <u>7-29-2018</u>
NANCY KOERPERICH, Agency Administrator Madera-Mariposa-Merced Unit Chief	
Approved by: 	Date: <u>7/28/2018</u>
TODD STILES, Lead Resource Advisor Ferguson Fire	

# Suppression Repair Across Land Jurisdictions

- Repair priorities vary with land ownership
  - Some state and private lands may wish that little or no repair be conducted
  - Repair on private lands is often the responsibility of state fire agencies
- An incident may have multiple repair plans/standards by agency or one repair plan signed by all agencies





# Suppression Repair Across Land Jurisdictions



Must be able to clearly identify the land jurisdiction associated with individual impacts

# Writing the Suppression Repair Plan

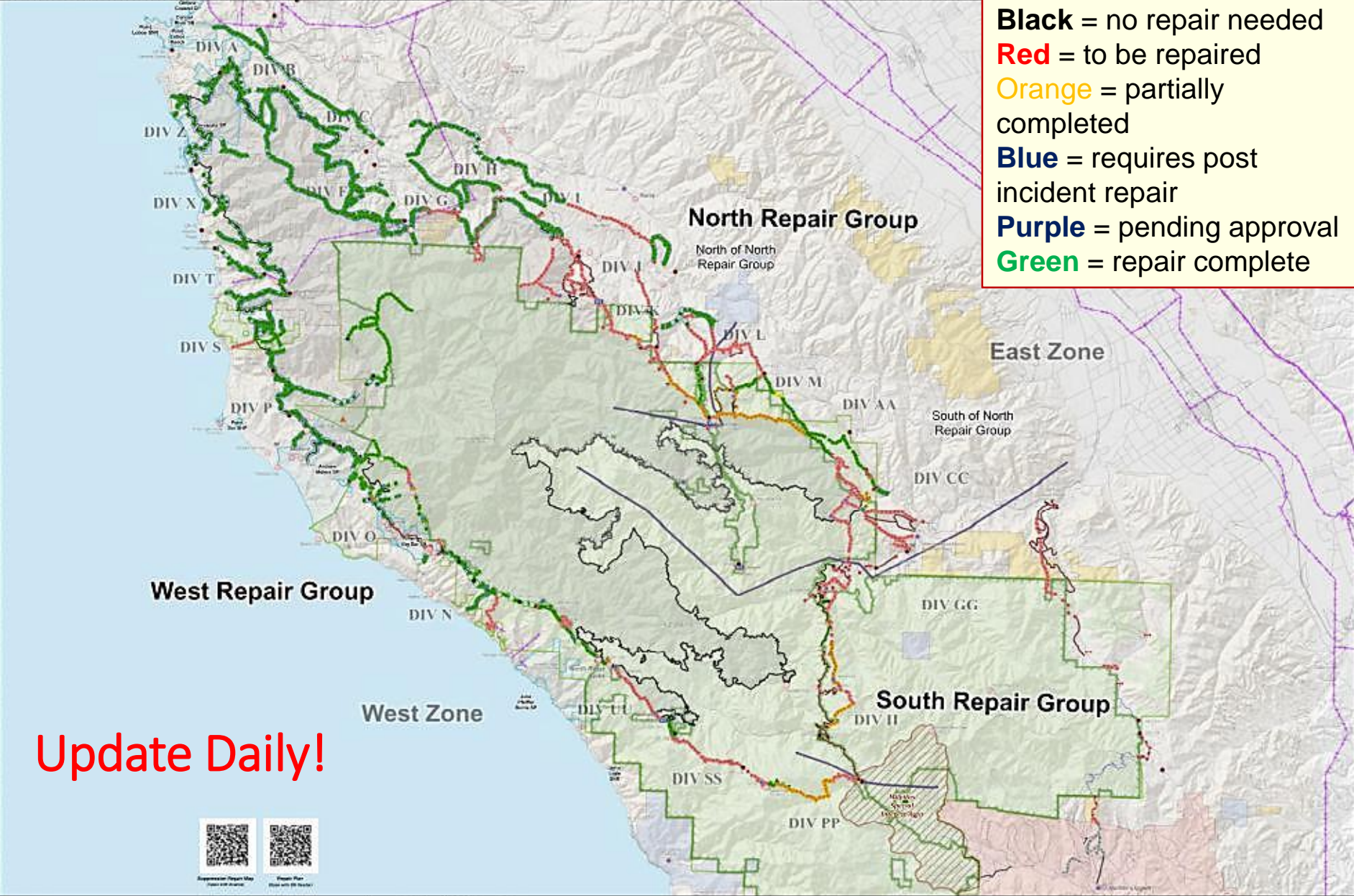
- Responsibility of the Lead READ to create
- Typically compiled from previous repair plans and local guidance from home unit subject matter experts
  - Home units should consider preemptively creating programmatic SRPs
- Commence writing of the plan as soon as possible
- Plan will be reviewed, amended, approved, and signed by IC, respective agency administrators, and Lead READ
- Oftentimes specific repair standards for each land agency or an incident-wide plan agreed upon by all agency administrators
- Include an abbreviated version of the general repair standards in the IAP throughout the duration of repair.
- There may be amendments to the repair

# The Suppression Repair Map

- Critical tool for:
  - Inventorying suppression repair impacts
  - Planning suppression repair response
    - Estimating:
      - repair timeline
      - resources needed
      - operational progression
  - Tracking completion of suppression repair implementation
    - Impacts color coded to indicate repair status
    - Update repair map daily
- In complex incidents a map identifying the locations of different suppression repair treatments may be needed



**Black** = no repair needed  
**Red** = to be repaired  
**Orange** = partially completed  
**Blue** = requires post incident repair  
**Purple** = pending approval  
**Green** = repair complete



Update Daily!



# Suppression Repair

Soberanes  
 CA-BEU-003422  
 10/3/2016

- Legend**
- Repair Status**
- Outstanding Forest Service Admin Boundary
  - No Repair Needed
  - To Be Repaired
  - Partially Completed
  - Requires Post Incident Report
  - Pending NEAP Approval
  - Repair Complete

- Suppression Repair Points**
- Communication Site
  - Ditch Point
  - Fence
  - Fish Habitat Concern
  - Grates
  - Hospital or Incident Base
  - Mobile Weather Unit
  - Cover
  - Reservoir / Mud Pit
  - Road Barrier
  - Road Repair
  - Safety Zone
  - Sling Site
  - Spike Camp
  - Sighting Area
  - Water Development & Drift Site

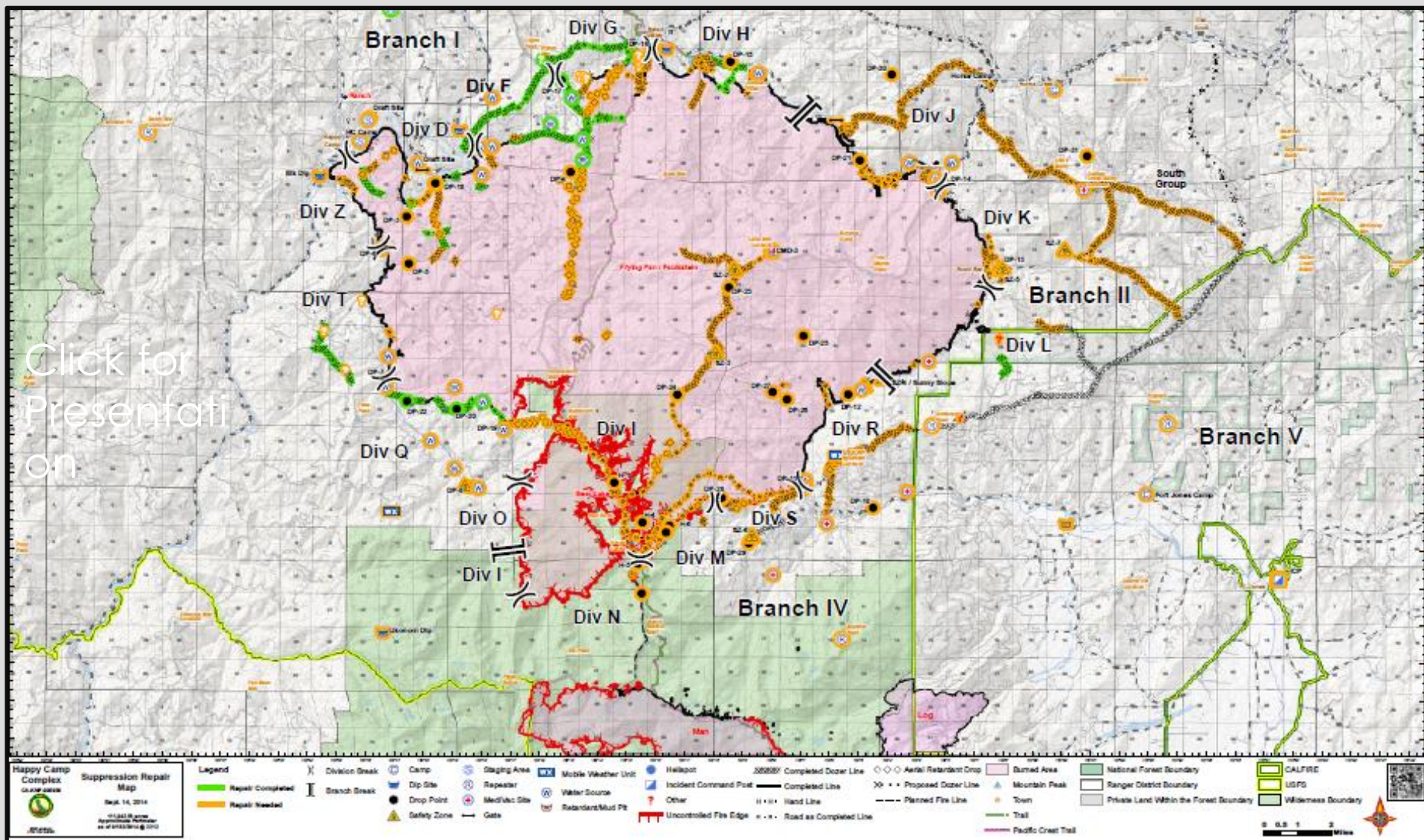
- Uncontrolled Fire Edge
- Completed Dozer Line
- Hand Line
- Road as Completed Line
- Completed Line
- Roads
- Transmission Lines
- Wilderness
- Administrative Forest
- State Park Boundary
- USDA Forest Service
- Bureau of Land Management
- Other State Lands
- Department of Defense
- Private

- Slope and Private Lands Relieved by Cal Fire as of 5/30/2016





Click for  
Presentation

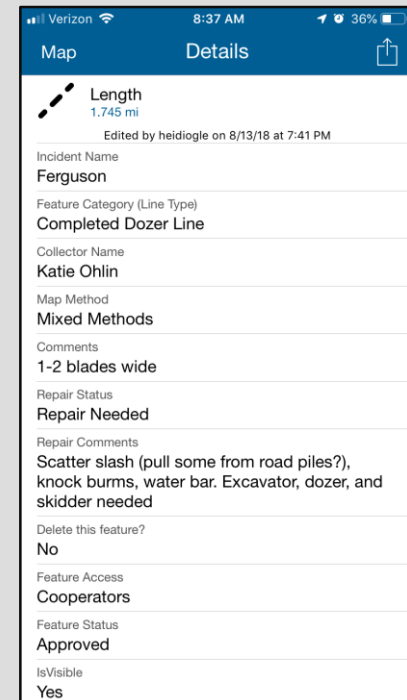
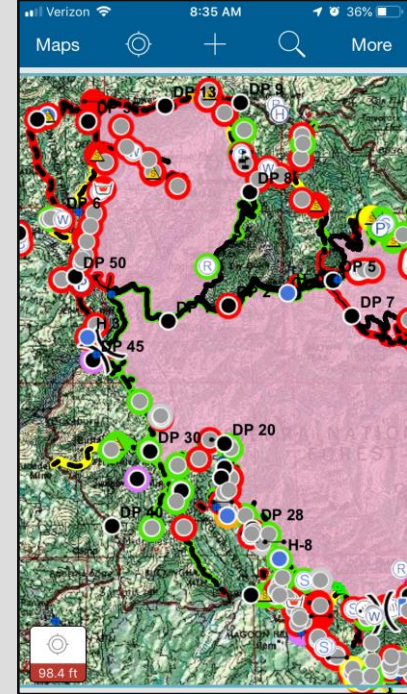


# ESRI Collector

- Powerful tool for the effective management of suppression repair
  - Facilitates efficient sharing of information across the incident
  - Ability to add meta-data to line and point data
    - Ex. repair status, repair recommendations, etc.

However....

- Not available on all incidents
- Requires robust GIS support with specialized skills
- Takes time to set up and manage
- Requires devices which can be challenging to source
- May not be supported through duration of incident



# 5Ds: Waterbars

- Distance
- Diagonal
- Divert
- Discharge
- Dissipate

Fireline slope %	Maximum Distance Apart (feet)
1-6 .....	300
7-9 .....	200
10-14 .....	150
15-20 .....	90
21-40 .....	50
41-60 .....	25

*Recommended spacing for waterbars on firelines. Waterbars should be no further apart than this, but they may be closer. When in doubt, put in more. From: UDSA-Forest Service, "Sale Administrator's Handbook"*

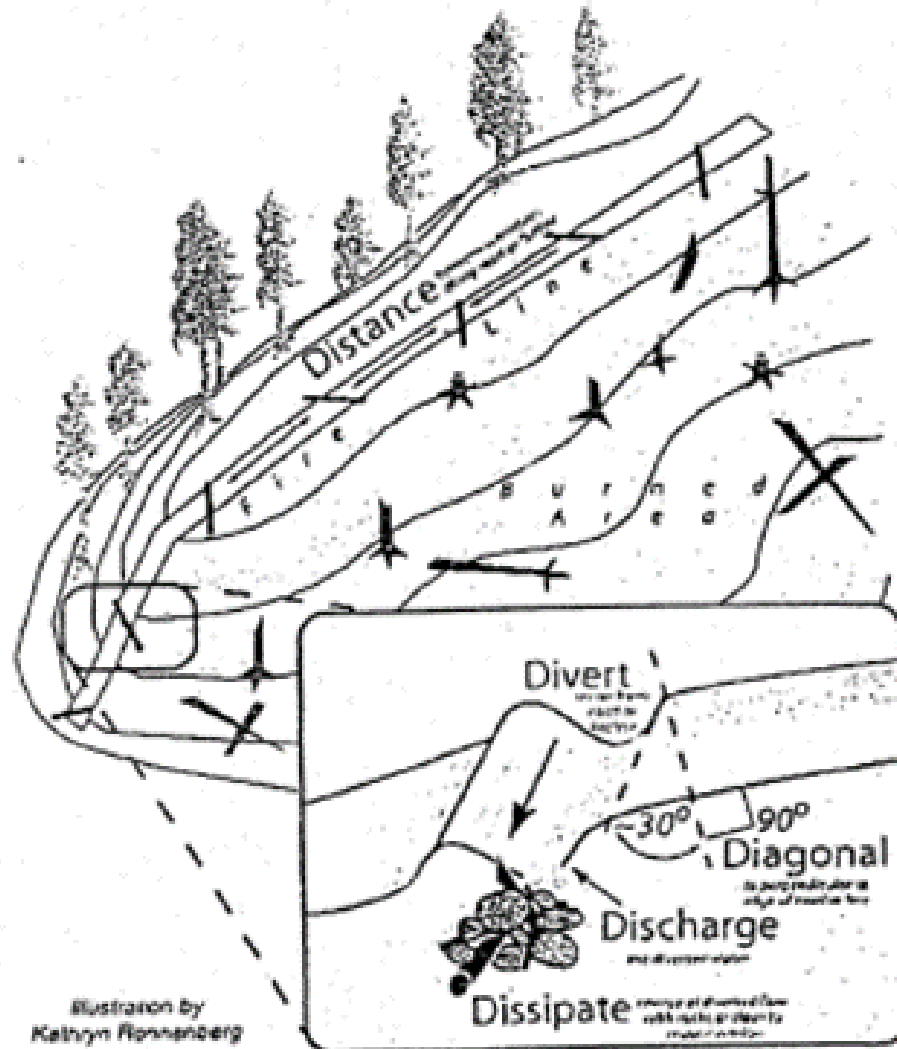
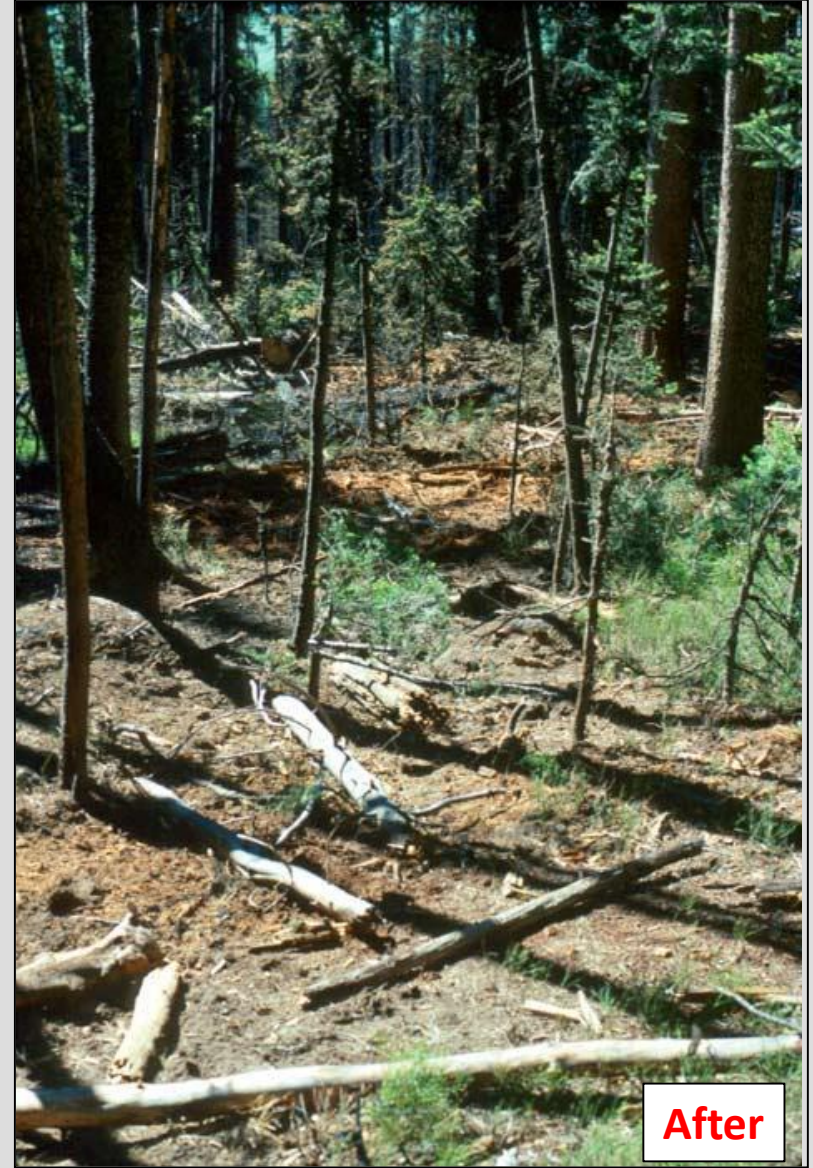


Illustration by  
Kathryn Ronsenberg

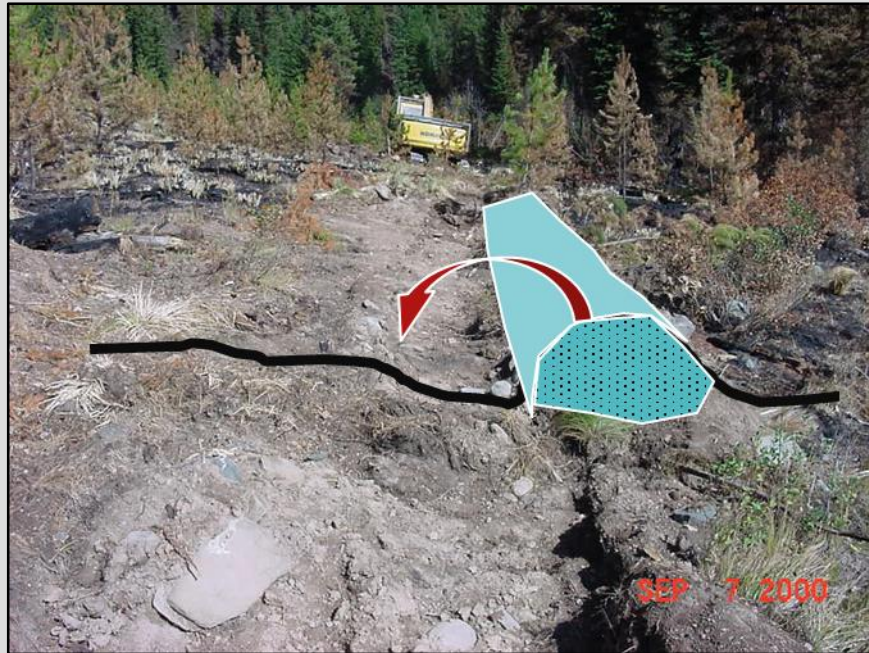


# Handline Repair





# Repairing Dozerline





# Dozerline Repair





# Dozerline Repair



# Dozerline Repair





# Dozerline Repair



**5 Years After**



# Dozerline Repair



**10 Years After**



# Repairing Stream Crossings







**Before**





**After**



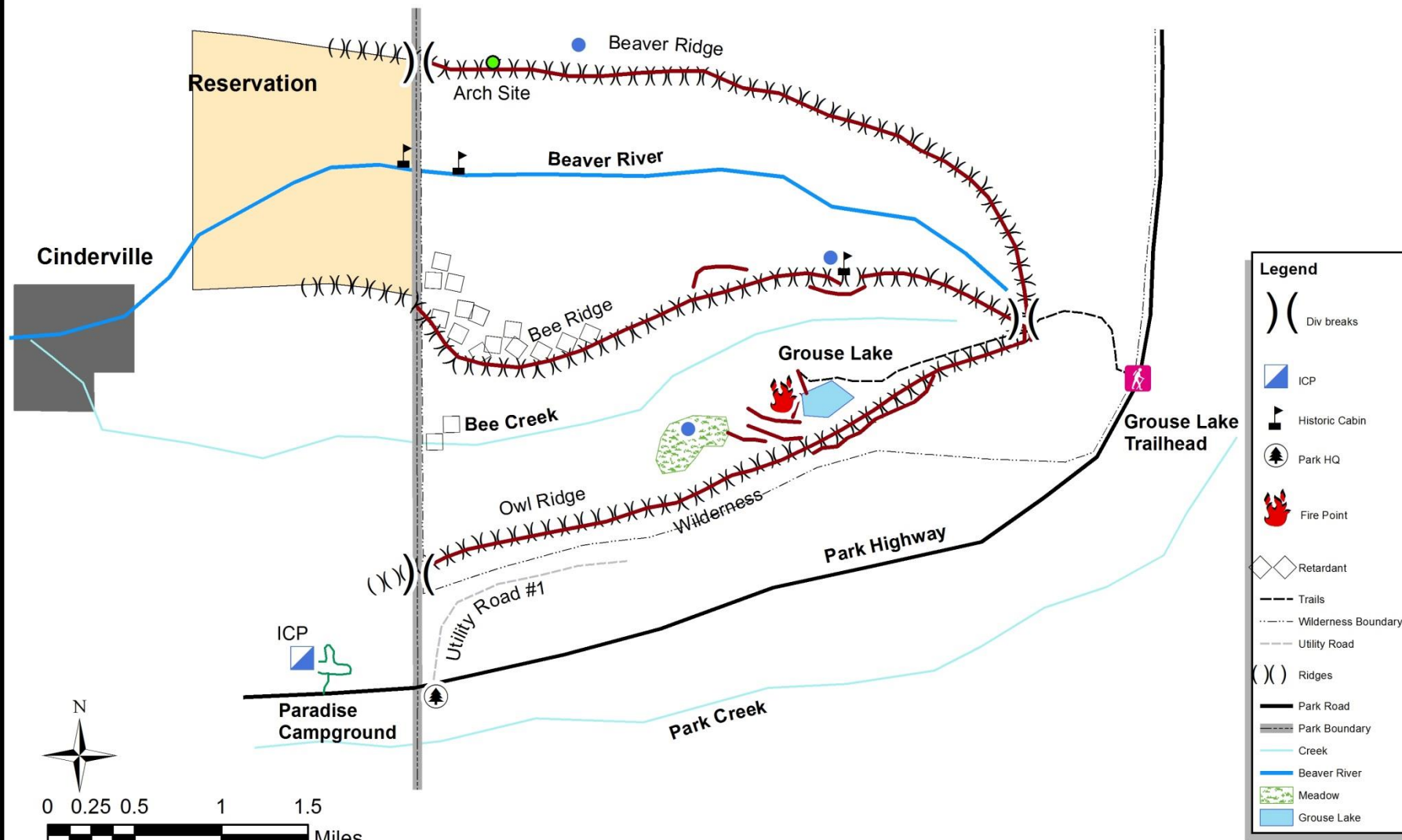
# Suppression Repair and Safety







# Grouse Fire: Suppression Rehabilitation



# Grouse Fire General Suppression Damage Repair Standards

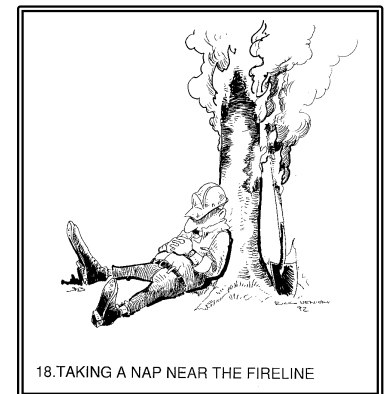
- Flush cut stumps to 4-6” height, no waffle-cut surfaces
- Roll cut logs back into alignment and/or cover cut ends with slash; no beaver cut ends
- Pick-up all litter, flagging, etc. (leave hazard flagging)
- Handlines
  - Pull berms back to grade
  - No water bars...pull unburned material on to line
- Spike Camps
  - Sweep with pine boughs
  - Fill latrines
- Helispots
  - Cover exposed ground with unburned material



Appendix J

# Grouse Fire Suppression Damage Specific Resource Advisor Needs

- Make sure that all suppression-related impacts are mapped
- Survey ground disturbance for cultural sites and rare plants
- Clean up cabin wrap
- Check for possible retardant misapplications





# DAY 4, 2100: Talk with Jun

- Inform him of discussions with IMT and outline mop-up standards. Have him inform other REAFs.
- We'll ensure that suppression repair maps and plans make it into REAF "care packages."
  - We'll send extras for the crews

# DAY 4, 2100: Talk with Jun CONT.

- Jun says he got to DIV Y about 2045 and tied in with Sandee and Echo
- Echo said the DIVS wouldn't let them scout ahead of the line construction...too dangerous
- They came upon obsidian flakes and tools, pottery, fire-cracked rock, etc. in the handline and then encountered a crew...

# DAY 4, 2100: Talk with Jun CONT.

- Site was flagged and DIVS was notified...





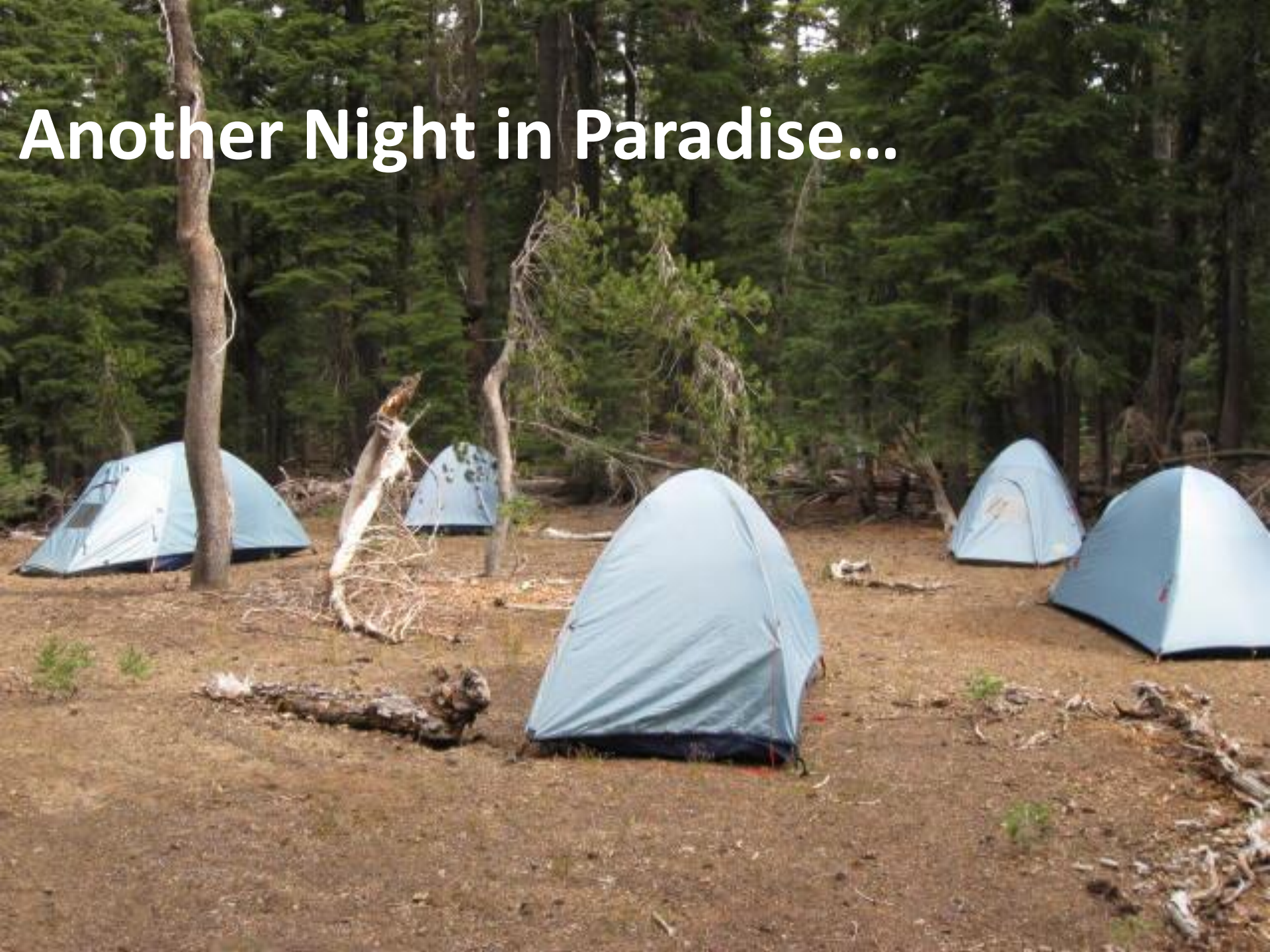
# DAY 4, 2130: Fewer To-Do's

- Check with Marti and Kent on status of :
  - REAF “care packages”
  - order for Rich and Brian
  - suppression repair maps
- Morning Briefing checklist
- Unit log
- Time
- Much needed extra sleep





**Another Night in Paradise...**







...but not all fun and games

# DAY 5, 0515: Another Day at the Office

- Up early and head over to the Operations trailer for Pre-Operational briefing.
- A couple of crews will be conducting suppression repair on DIV B and one on south end of DIV Z.



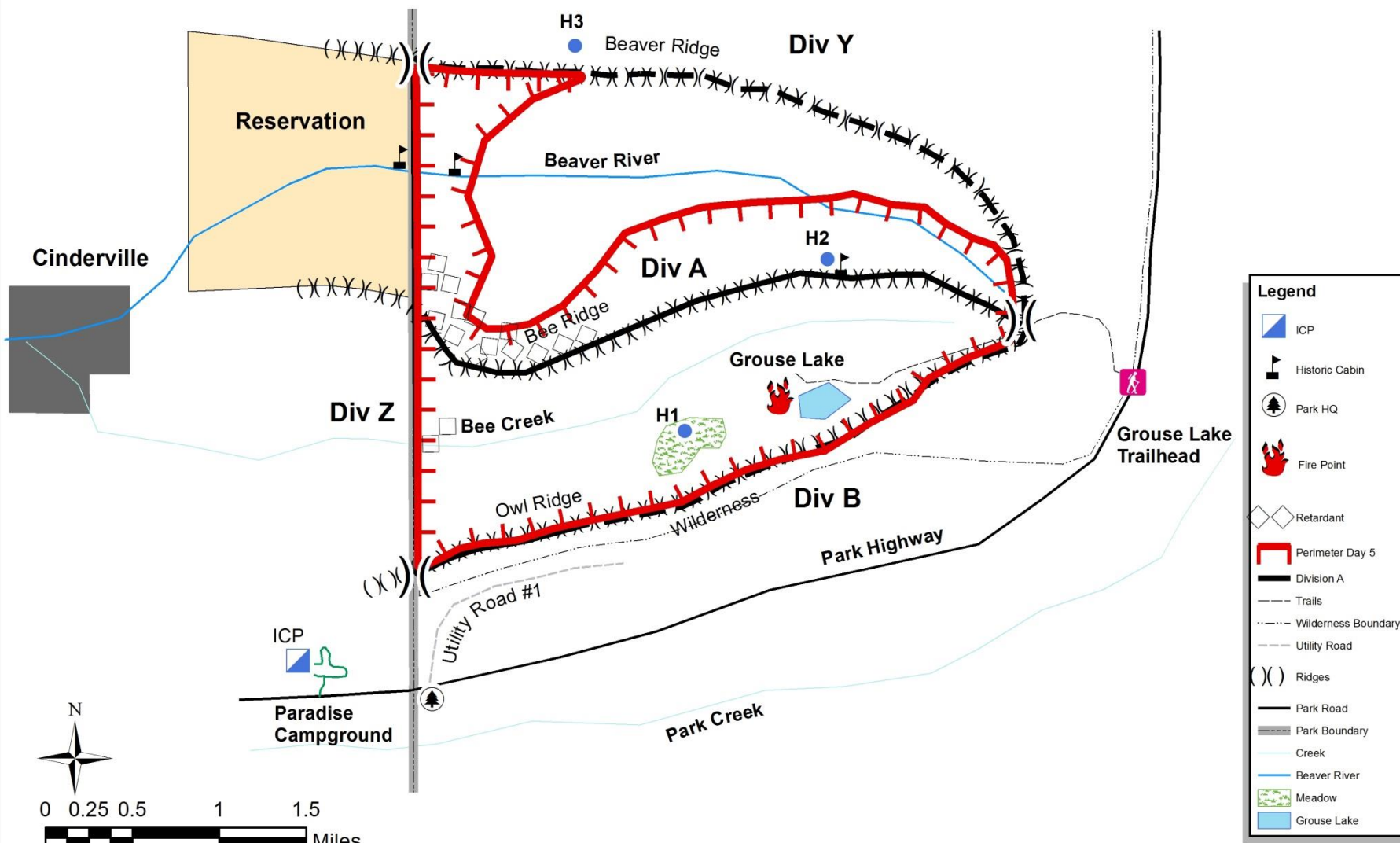
# Day 4, 0600 Operations Briefing







# Grouse Fire Situation: Day 5, 0600



# DAY 5, 0645: Operations Briefing READ Input

- Huge thanks to crews for cooperation and assistance
- Reminder that REAFs are available to assist with fireline issues including interpreting suppression damage repair standards
- Bears...it's about their safety and yours
- Weed cleaning station is still in operation at the helibase
- Demobing resources will need to run through weed wash at park entrance station

# DAY 5, 0700: Division Breakouts

Provide DIVS or others who will be heading to the fireline with copies of the signed suppression repair plan and suppression repair maps.





# DAY 5, 0745: Odd and Ends



- Call Jun and let him know about crews heading into DIV B and Z for suppression repair...he should notify appropriate REAFs. Things are going well with burn-out operation on DIV Y.
- Check helispot for weed cleaning station and outgoing REAF “care packages”
- Stop by Ops trailer to make sure everyone is on the same page. Ops thinks the team may be able to declare containment as soon as day after tomorrow.
- Call Rich...he and Brian are about four hours out.

DAY 5, 1300: Rich and Brian arrive...







**Brian Rasmussen-**  
**WHIS**  
 Geologist  
*Quals:* BAHY, BAGE,  
 GEOL, HYDR, READ,  
 REAF, SCUB, National  
 BAER Team member  
*Physical:* Moderate

# Pacific West Region National Park Service U.S. Department of the Interior





# BAER Team Inbrief

- Current status of the fire
  - History, current situation, anticipated actions
  - Fire behavior and burn severity
  - IMT status
- Known critical impacts, values at risk, vulnerable resources, potential BAER concerns
- Planning Cycle: daily meeting schedule
- IMT Introductions



# BAER Team Leader Asks...

- Known fire severity
- BAER staffing- available READs or REAFs
- Access to READ records, management plans and other documentation
- Logistics, work space, printers, plotters, team support
- Helicopter access for recon
- GIS products
- Safety concerns

## SO CAL 2003

BAER is an  
**EMERGENCY**  
function and  
should be treated  
as such by the  
Incident  
Commander and  
the Agency  
Administrator



FIRE – 6  
LIVES  
LOST



FLOOD –  
16 LIVES  
LOST



# Why is BAER necessary?

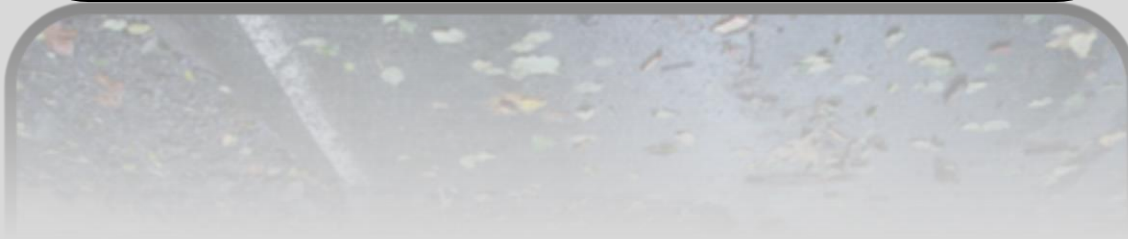


Flooding!

# WHY IS BAER NECESSARY?



Erosion!





# WHY IS BAER NECESSARY?



Invasive  
Species!



# Protecting cultural resources

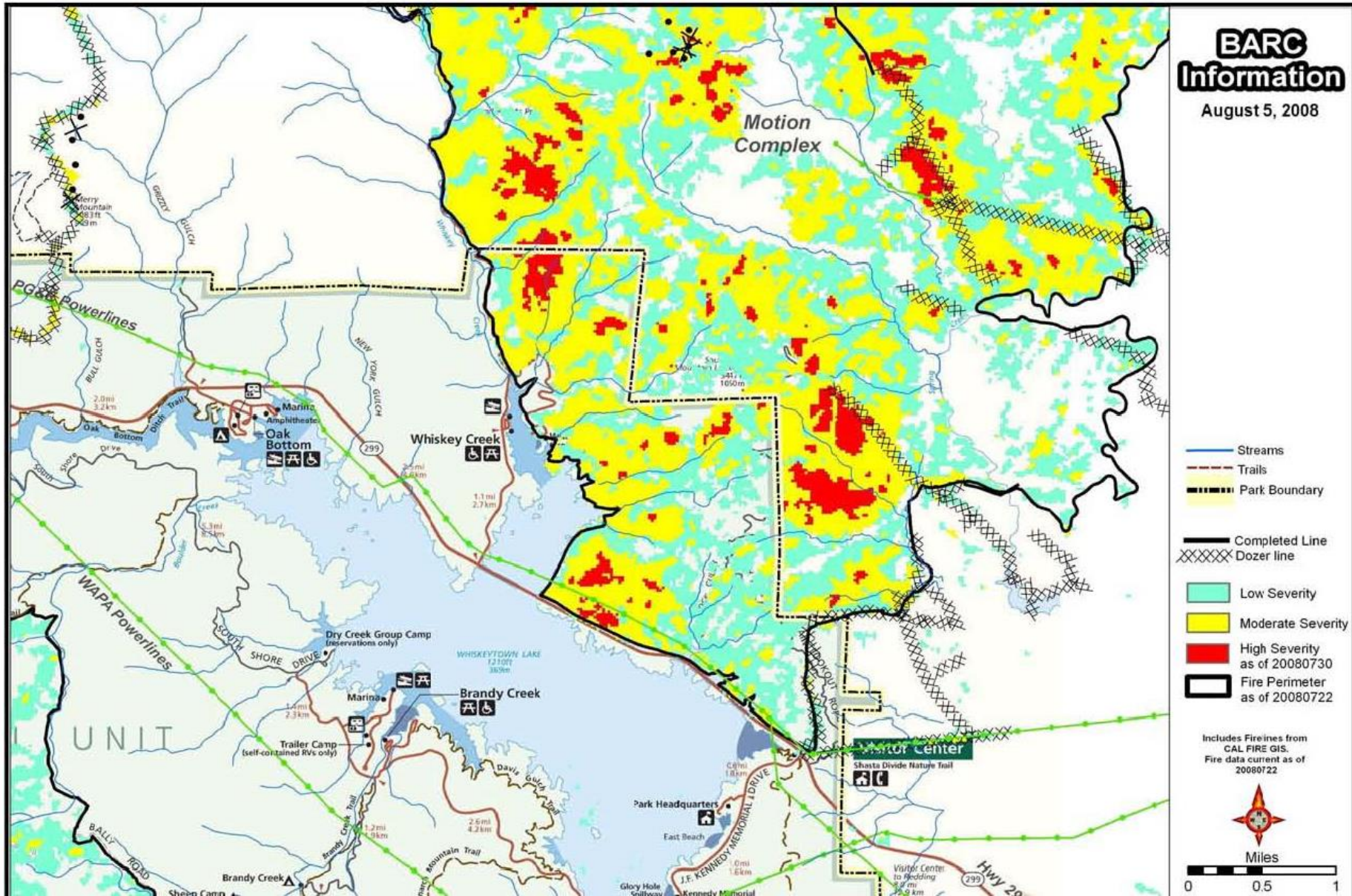






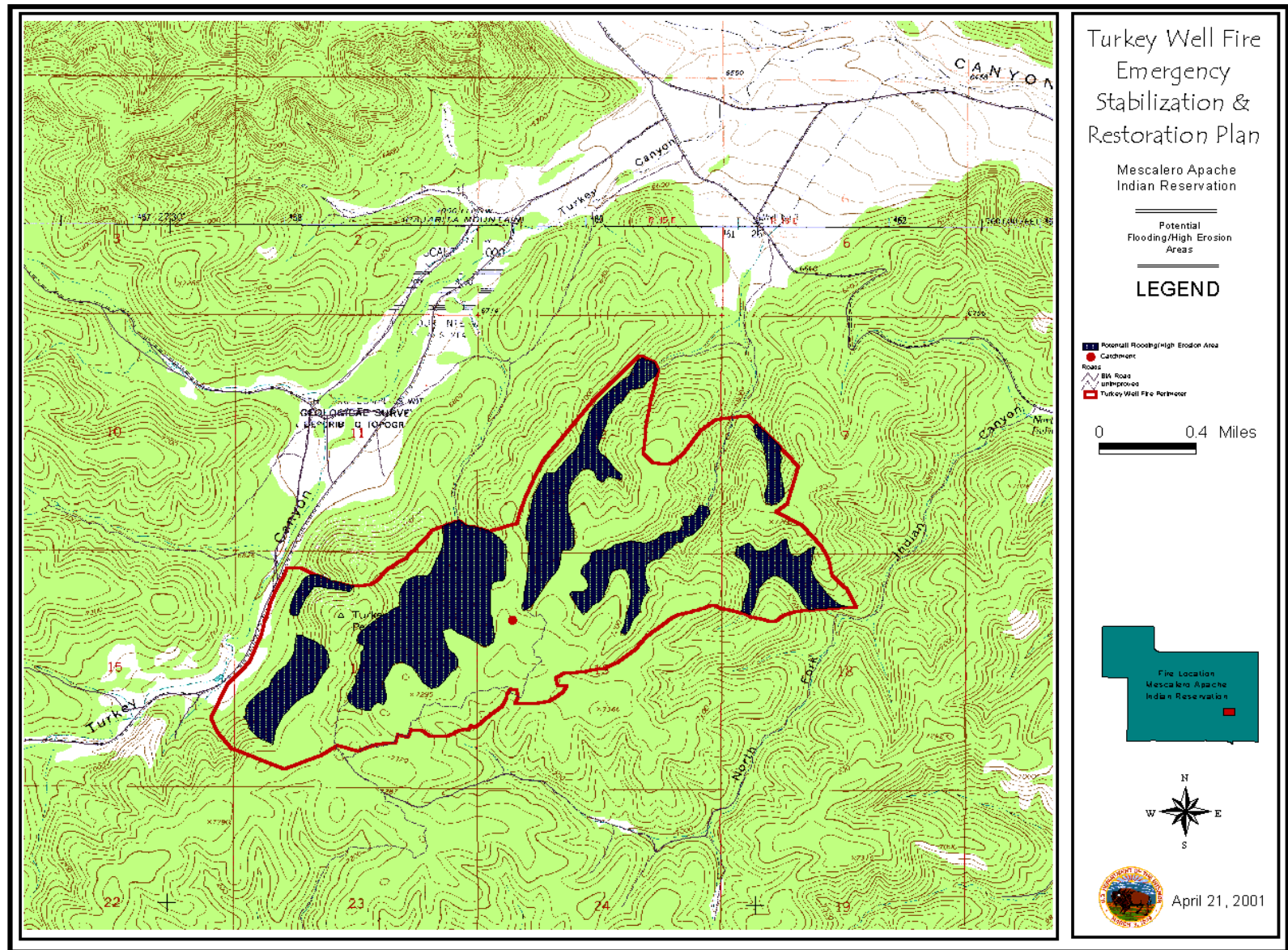


## MAP 1. Burned Area Reflectance Classification (BARC) Map, Motion Fire





# Determining Risks

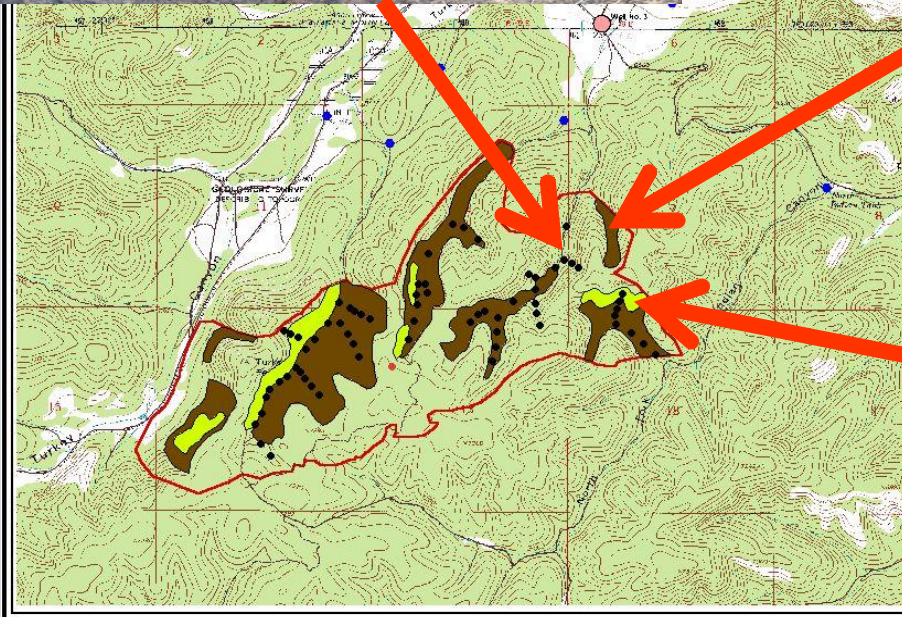




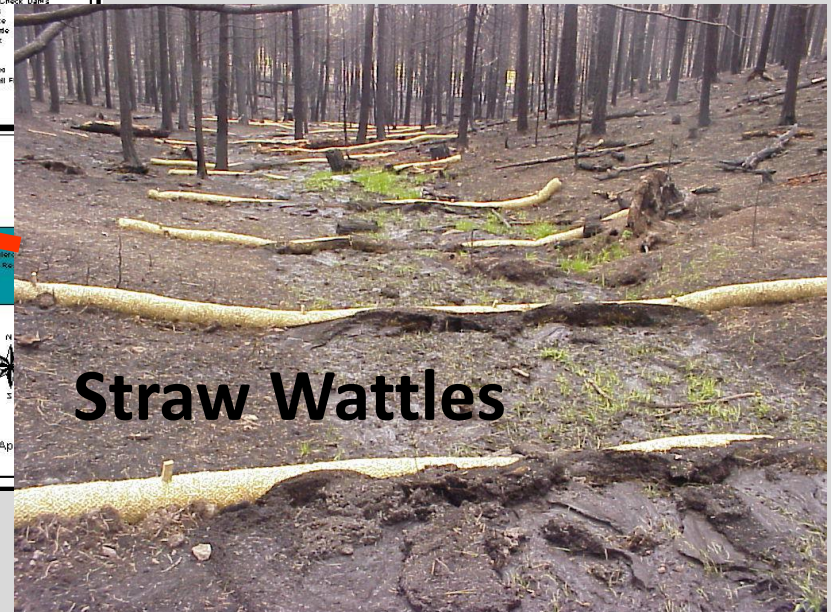
# Prescribing Treatments



**Straw Bale Check Dam**



**Log Erosion Barriers**



**Straw Wattles**



# DAY 8: Team Close-out...How did we do?

- Habitat?
- Wilderness?
- Invasive species?
- Bears?
- Amphibian/invertebrate habitat?
- Cultural resources?
- Socio-economic issues?
- Suppression damage repair?



# DAY 9: Final READ Documentation

## APPENDIX G: SAMPLE RESOURCE

### ADVISOR FINAL REPORT

---

REPORT DATE \_\_\_\_\_

MEMO TO: \_\_\_\_\_, Agency Administrator

FROM: \_\_\_\_\_, Resource Advisor

- Incident Date(s):
- Incident Name:
- Incident Number:
- Incident Location (Legal Description):
- Incident Commander:
- Additional Resource Advisors:
- Date/Time Resource Advisor Arrived:
- Date/Time Resource Advisor Released:
- Date/Time of Containment: Date/Time of Control:
- Map(s) Used (Attach maps):
- Point of Origin:
- Incident Cause:
- Size of Incident:
- Land Status (Acreage):

#### RESOURCES THREATENED/DAMAGED/DESTROYED

- Infrastructure
- Cultural Sites
- Wildlife Habitat
- Threatened, Endangered, and Special Status Species
- Special Areas (wilderness, wild and scenic rivers)
- Range/Forest Improvements
- Vegetation and Soil Description (Give general description of vegetation present, slope, erosion potential, and soil texture; e.g., gravelly, sandy, etc.)
- Special Use Areas, Permitted Areas, Grazing Allotments
- Wild Horses
- Survey monuments (brass cap, stone, wood, etc.) and boundary line markers
- Water Sources
- Meadows
- Museum and archival collections and facilities
- Other

#### DAMAGES FROM INCIDENT ACTIVITIES THAT HAVE BEEN REHABILITATED OR NEED TO BE COMPLETED DURING THE INCIDENT

- Dozer lines
- Hand lines
- Pump sites
- Spike camps
- Helispots
- Booming
- Diversions
- Other

#### ADDITIONAL REHABILITATION RECOMMENDATION(S) AND RATIONALE

- Revegetation
- Fences
- Roads
- Land Survey Monuments and Boundary Line Markers
- Noxious Weeds
- Water
- Other

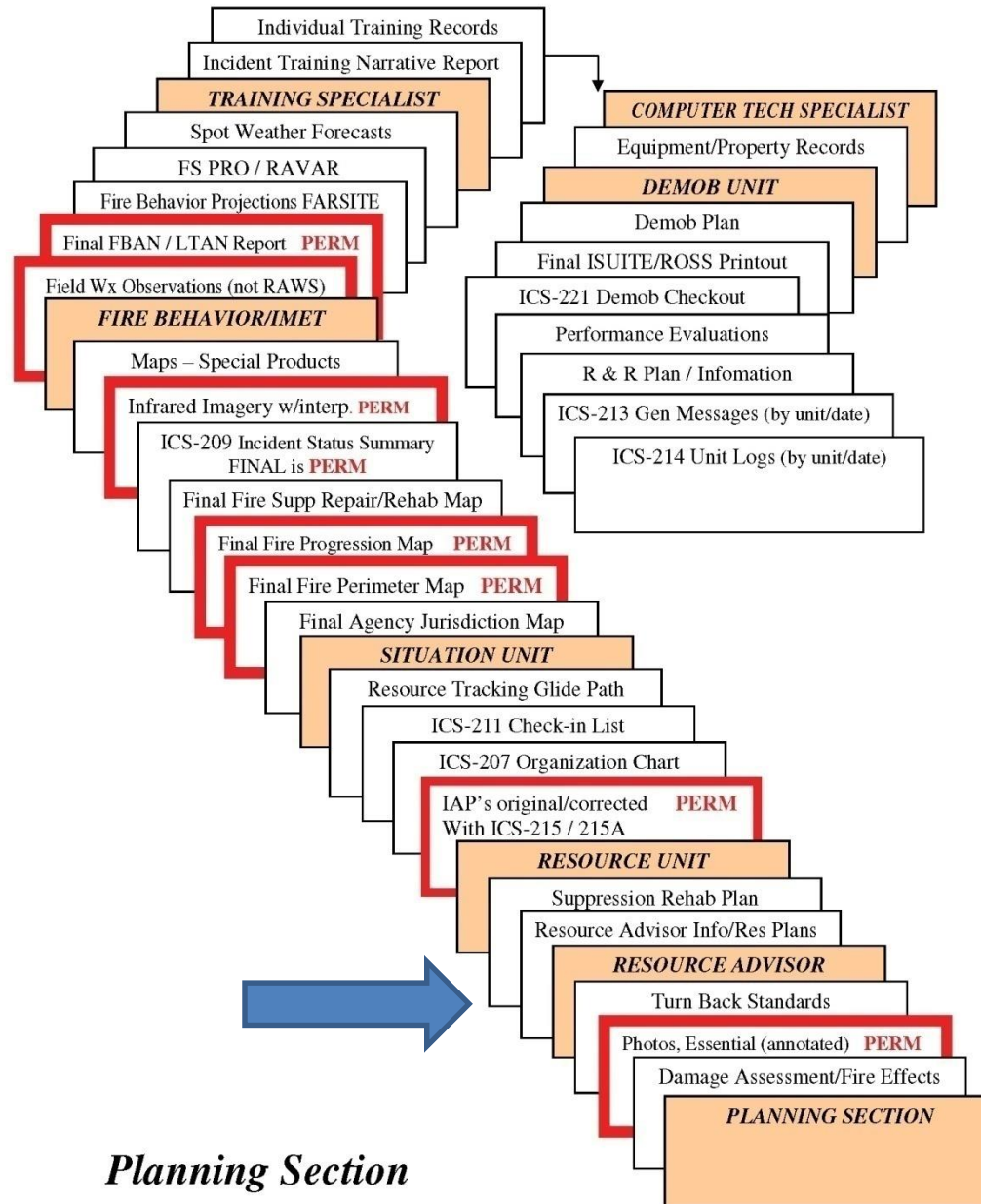
#### OTHER INFORMATION



Appendix G

# Wildland Fire Incident Records

## Organizing Section Documentation



# DEMOP-JULY 22 MORNING

C-2 ALPINE IHC REASSIGNED - 1st Out  
 C-6 CRAIG IHC REASSIGNED - 1st Out  
 C-10 PIKE IHC  
 C-13 TATANKA IHC  
 C-11 WYOMING IHC  
 O-26 JOANNE YOUNG  
 O-37 BRIAN HICKS  
~~O-38 DEAN DICKINSON~~

## DEMOP PROCEDURE

FOR DEMOP AT DEMOP 1 AND DEMOP 2 DEMOP, PLEASE FOLLOW THESE PROCEDURES.

• Ensure that crew and equipment have reports on the scene.

• Report to the head of the information board for the board information.

• For all equipment, ensure equipment has been used.

• Communication with other crew when a report has been made for the board information that equipment has been used. When a report has been made, ensure that the report has been made.

• Proceed to the next site and then back for investigation information of the site.

• If a crew has been assigned to work for the scene, ensure that the crew has been assigned.

Type 3 Organization  
 July 22 thru July 27

DEMOP 1: 1st Out (1st Out)  
 DEMOP 2: 1st Out (1st Out)  
 DEMOP 3: 1st Out (1st Out)  
 DEMOP 4: 1st Out (1st Out)  
 DEMOP 5: 1st Out (1st Out)  
 DEMOP 6: 1st Out (1st Out)  
 DEMOP 7: 1st Out (1st Out)  
 DEMOP 8: 1st Out (1st Out)  
 DEMOP 9: 1st Out (1st Out)  
 DEMOP 10: 1st Out (1st Out)

O-5016 Jim Hampson  
~~O-5017 ARON ADAMS~~  
~~O-5018 JON KINOSHITA~~  
 O-5043 CHRIS SCHOW  
 O-5062 DAVID WILLIS  
 O-5072 SCOTT McDERMID  
 -----  
 E-49 ELKHORN 601  
 E-64 BERNALILIO BRUSH 10

E-4 BRUSH 74  
~~E-59~~ E-65 RIO RANCHO  
 E-48 RED RIVER E3  
 E-56 San Juan BRUSH 10  
 E-46 HOMESTYLE TENDER  
 E-42 SUTHERLAND TENDER

O-5011 JOEY DIAZ  
 O-5012 JARED OLSON  
 O-5010 PAMELA DALE  
 O-5068 JUDITH DYESS  
↑ REASSIGNMENT ↑  
 O-5015 BRIAN ROWE

O-5004 J. MELLNICK  
 O-5005 MIKE HUNTER  
 O-5013 TROY PALMER  
 O-5029 G. HERRING  
 O-5059 KORN RUMPH



# Performance Rating

<b>INCIDENT PERSONNEL PERFORMANCE RATING</b>		INSTRUCTIONS: The immediate job supervisor will prepare this form for each subordinate. It will be delivered to the planning section before the rater leaves the fire. Rating will be reviewed with employee who will sign at the bottom.	
<b>THIS RATING TO BE USED ONLY FOR DETERMINING AN INDIVIDUAL'S PERFORMANCE</b>			
1. Name		2. Fire Name and Number	
3. Home Unit ( <i>address</i> )		4. Location of Fire ( <i>address</i> )	
5. Fire Position	6. Date of Assignment From: _____ To: _____	7. Acres Burned	8. Fuel Type(s)
<b>9. Evaluation</b>			
Enter X under appropriate rating number and under proper heading for each category listed. Definition for each rating number follows:  0 - Deficient. Does not meet minimum requirements of the individual statement. DEFICIENCIES MUST BE IDENTIFIED IN REMARKS.  1 - Needs to improve. Meets some or most of the requirements of the individual element. IDENTIFY IMPROVEMENT NEEDED IN REMARKS.			

[https://www.nwccg.gov/sites/default/files/products/ics-forms/ics\\_225\\_wf.pdf](https://www.nwccg.gov/sites/default/files/products/ics-forms/ics_225_wf.pdf)

# Outta Here...

O-229 KINOSHITA, JUN

Original

07/03/2016 - 07/13/2016

F-2016-CA-LPF-001986-0561B

INCIDENT TIME REPORT															1. Hired At (e.g., ID-BOF) CA-YNP									
2. Employee Common Identifier										3. Type of Employment (X One) <input type="checkbox"/> Casual <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other					4. Hiring Unit Name (e.g., Ranger District)									
5. Name (First, Middle, Last) <b>JUN KINOSHITA</b>										6. Hiring Unit Phone Number					7. Hiring Unit Fax Number									
Column A					Column B					Column C					Column D									
					Same as Column <input type="checkbox"/> A					Same as Column <input type="checkbox"/> A <input type="checkbox"/> B					Same as Column <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C									
8. Incident Name <b>PINE</b>					8. Incident Name <b>PINE</b>					8. Incident Name <b>PINE</b>					8. Incident Name <b>PINE</b>									
9. Incident Order Number (e.g., ID-BOF-000123) CA-LPF-001986					9. Incident Order Number (e.g., ID-BOF-000123) CA-LPF-001986					9. Incident Order Number (e.g., ID-BOF-000123) CA-LPF-001986					9. Incident Order Number (e.g., ID-BOF-000123) CA-LPF-001986									
10. FireCode (e.g., B2C5) 0507/KC28		11. Resource Request Number (e.g., O-33) O-229			10. FireCode (e.g., B2C5) 0507/KC28		11. Resource Request Number (e.g., O-33) O-229			10. FireCode (e.g., B2C5) 0507/KC28		11. Resource Request Number (e.g., O-33) O-229			10. FireCode (e.g., B2C5) 0507/KC28		11. Resource Request Number (e.g., O-33) O-229							
12. Position Code (e.g., CRWB-T) REAF		13. AD Class (e.g., B)		14. AD Rate	12. Position Code (e.g., CRWB-T) REAF		13. AD Class (e.g., B)		14. AD Rate	12. Position Code (e.g., CRWB-T) REAF		13. AD Class (e.g., B)		14. AD Rate	12. Position Code (e.g., CRWB-T) REAF		13. AD Class (e.g., B)		14. AD Rate					
15. Home/Hiring Unit Account Code					15. Home/Hiring Unit Account Code					15. Home/Hiring Unit Account Code					15. Home/Hiring Unit Account Code									
Mo	Day	Start	Stop	Hours	Mo	Day	Start	Stop	Hours	Mo	Day	Start	Stop	Hours	Mo	Day	Start	Stop	Hours					
7	3	15:00	18:00	3.0 TVL	7	6	05:30	12:30	7.0	7	8	13:00	19:30	6.5 HP	7	10	20:00	22:00	2.0					
7	4	06:00	10:00	4.0 TVL	7	6	13:00	18:00	5.0	7	8	20:00	21:30	1.5 HP	7	11	06:00	12:00	6.0					
7	4	10:00	12:00	2.0	7	6	18:30	21:30	3.0	7	9	06:00	12:00	6.0	7	11	12:30	19:30	7.0					
7	4	12:30	19:30	7.0	7	7	04:30	12:30	8.0 HP	7	9	12:30	19:30	7.0	7	11	20:00	22:00	2.0					
7	4	20:00	21:00	1.0	7	7	13:00	19:00	6.0 HP	7	9	20:00	22:00	2.0	7	12	06:00	12:00	6.0					
7	5	06:00	12:00	6.0	7	7	19:30	21:30	2.0 HP	7	10	06:00	12:00	6.0	7	12	12:30	19:30	7.0					
7	5	12:30	21:00	8.5	7	8	04:30	12:30	8.0 HP	7	10	12:30	19:30	7.0	7	12	20:00	22:00	2.0					
Year 2016		16. Total Hours		31.5	Year 2016		16. Total Hours		39.0	Year 2016		16. Total Hours		36.0	Year 2016		16. Total Hours		32.0					
In the "hours" column, indicate "H" for hazard pay, "E" plus % for environment differential, "T" for travel															17. Total Hours (all columns):					see last page				
18. Commissary and Travel															For Payment Center use only <u>Previous Invoices</u>									
18a. Month	18b. Day	18c. Category (e.g., commissary, meals, lodging, mileage, medical, etc.)							18d. Reimbursement	18e. Deduction	18f. FireCode													
19. Remarks															20. Employee Signature									
															21. Time Officer Signature									
NOTE: The above items are correct and proper for payment from available appropriations.																								

# After Fire Season: Grouse Fire After Action Review (AAR)

- What was planned?
- What happened?
- What went well?
- What can we do to improve?





# Effective Resource Advising



The Ten Habits of Highly Effective Resource Advisors

# 10. Be prepared for transitions

- Transitions are challenging and occur frequently on every incident
- “If it’s predictable....it’s preventable”
- “Close out” with outgoing resources and “in-brief” with incoming ones



“Whenever things are going smoothly get suspicious, because it probably won’t last for long.”

## 9. Become an expert of your “chunk of line”

- Engage!
- Know the ground, know the issues, know the people
- Take an active role in sourcing and communicating solutions
- Build strong operational relationships
- Anticipate issues and address them proactively

“Take ownership and auger in!”



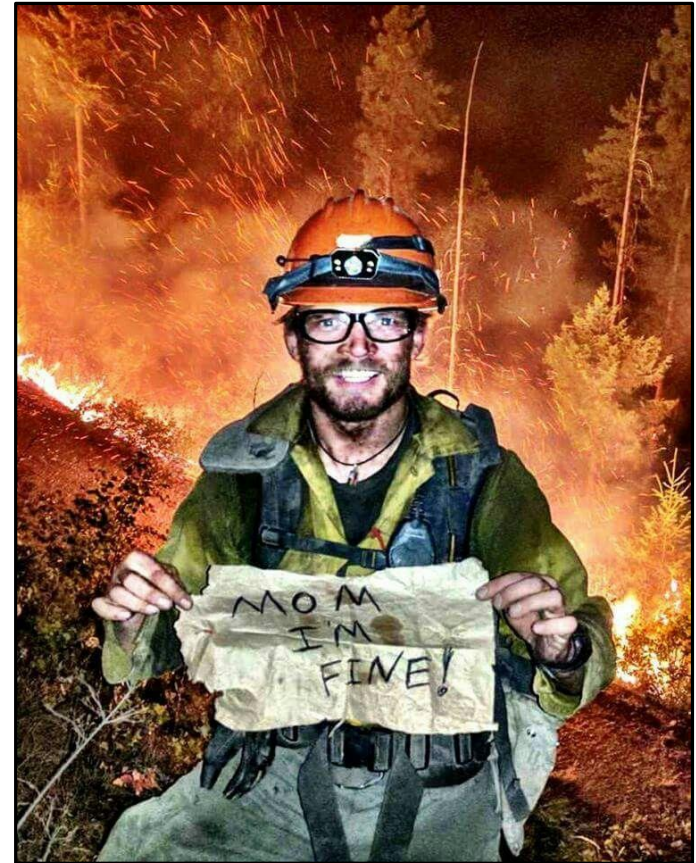


## 8. Be prepared for STRESS

- Ask for help when needed
- Delegate responsibilities
- Resist perfectionism
- Stay organized
- Work within your limits
- Pace yourself for the duration
  - Practice self-care

Safety is your top priority

“Be PROACTIVE...Not REACTIVE”



## 7. Maintain perspective

- Embrace all of the incident objectives
- Prioritize your efforts and attention to the most critical resources and impacts
- Accept that some damage may be unavoidable
- Don't dwell on impacts which have already occurred....the incident is not going to stop
  - Stabilize
  - Document
  - Develop strategies for repair



**“Despite your best efforts; stuff’s gonna break.”**

## 6. To earn respect you must demonstrate merit

- Be an asset not a liability...assist Operations in tackling resource concerns
- Contribute! Provide solutions not barriers.
- Make yourself available
- Be assertive as needed. Speak with confidence and authority.
- Listen. Demonstrate respect. Know the boundaries of your role.



**“If you are not at the table, you are on the menu.”** Nelson Siefkin



## 5. Invest in relationships

- **“We’re all on the same team.”**
  - Approach operational personnel as colleagues rather than adversaries
  - Work the line with the firefighters....share their discomfort and risk
  - Factor in plenty of time for conversations
  - Don’t just be a “drive-by” READ or CNP
- **Your new Best Friend:**
  - LREAD = AREP
  - REAF = DIVS



**Respect = Communication = Success**

**“What can I do for you?”**

## 4. Employ the Authority of the Resource

- “See. Understand. Care. Do.”
  - Interpret the resource to advocate for its protection
  - Tell a story
    - As appropriate
    - Keep it brief
    - Interest = Concern = Action
- “What is the minimum tool necessary to meet your objective?”



“While we think we are managing resources or events,  
we are really managing people.”

### 3. Understand your role and responsibilities as a READ

- Understand how the READ relates to the IMT and the Agency Administrator
- Understand how the READs role changes throughout different phases of an incident
- Understand the operations that are negotiable (fireline placement) vs. those that may not be (dropping hazard trees)
- Understand ICS



“READs do not prescribe tactics.  
They advise and communicate desired future conditions.”



## 2. Practice consistent messaging and decision-making

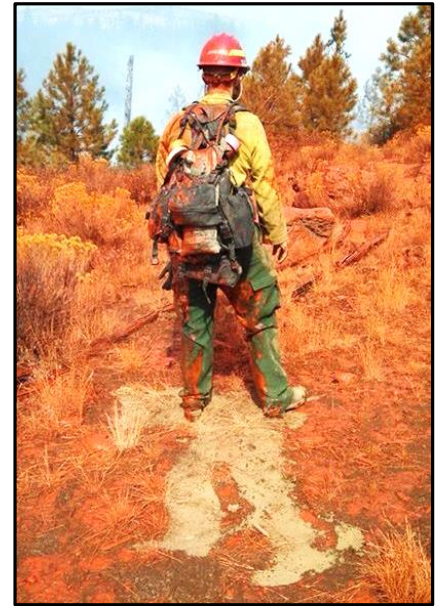
- Promote clear and consistent messaging across the READ organization
- Prioritize clear and frequent communication within the READ Team
- Be prepared to explain the “why” behind any resource message
- Keep messaging simple, concise, and memorable



**“Nothing erodes operational trust more completely than READs continually changing their message.”**

# 1. Strive to understand fire management from an operational perspective

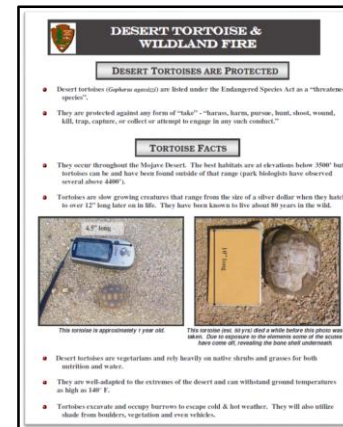
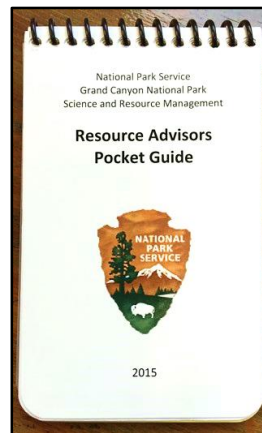
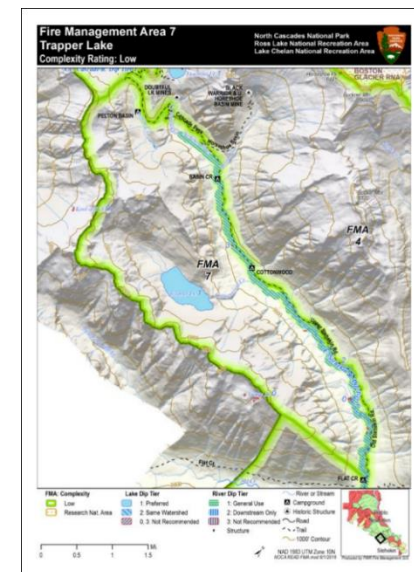
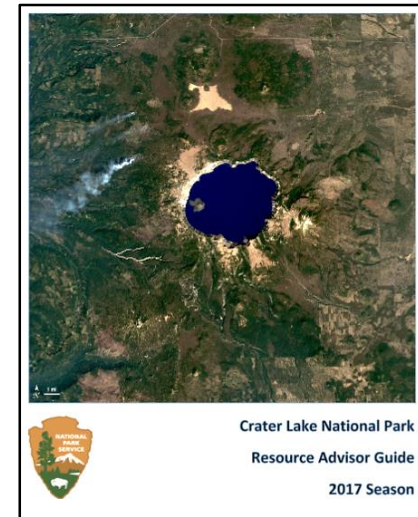
- ICS is the operating system of fire . Understand it.
- Fire terminology. Learn it. Use it.
- Fire culture. Accept it and integrate into it.
- Whenever possible gain firsthand operational fire experience.
  - Tactical capabilities and limitations
  - Risk exposure and avoidance
  - Fire effects



**“In order to be a good resource advisor you need to be a good firefighter.”** Robin Wills PWR FMO

# Pre-Incident Planning

- Home Unit READ Program
  - Annual READ refresher and end of season AAR
- Home Unit READ Guides
  - Pocket Guides
  - Sensitive Natural and Cultural Resources Maps
  - Resource Protection Measures
- Emergency Response Protocols for Resource Protection
  - Sensitive Resource Briefs
- Relationships with Cooperators & Tribal Partners





# READ RESOURCES

**READ Cohort Call...**monthly every 2nd Wednesday at 0830 PST

- Join the READ Cohort and receive email notifications
- Previous calls are archived and available to download on READ Cohort Cloud Vault

## Past Topics:

- Wilderness Issues
- Working with Heavy Equipment
- Creating a Home Unit READ Guide
- Preparing for Fire Season
- Working with AA/AREPs
- Aquatic Invasive Organisms
- Reporting Retardant Misapplication



# READ Cohort Cloud Vault

<https://new.cloudvault.usda.gov/index.php/s/7cyCJyoCER6z6ZW?path=%2F>

Extensive database of READ resources available to anyone with link

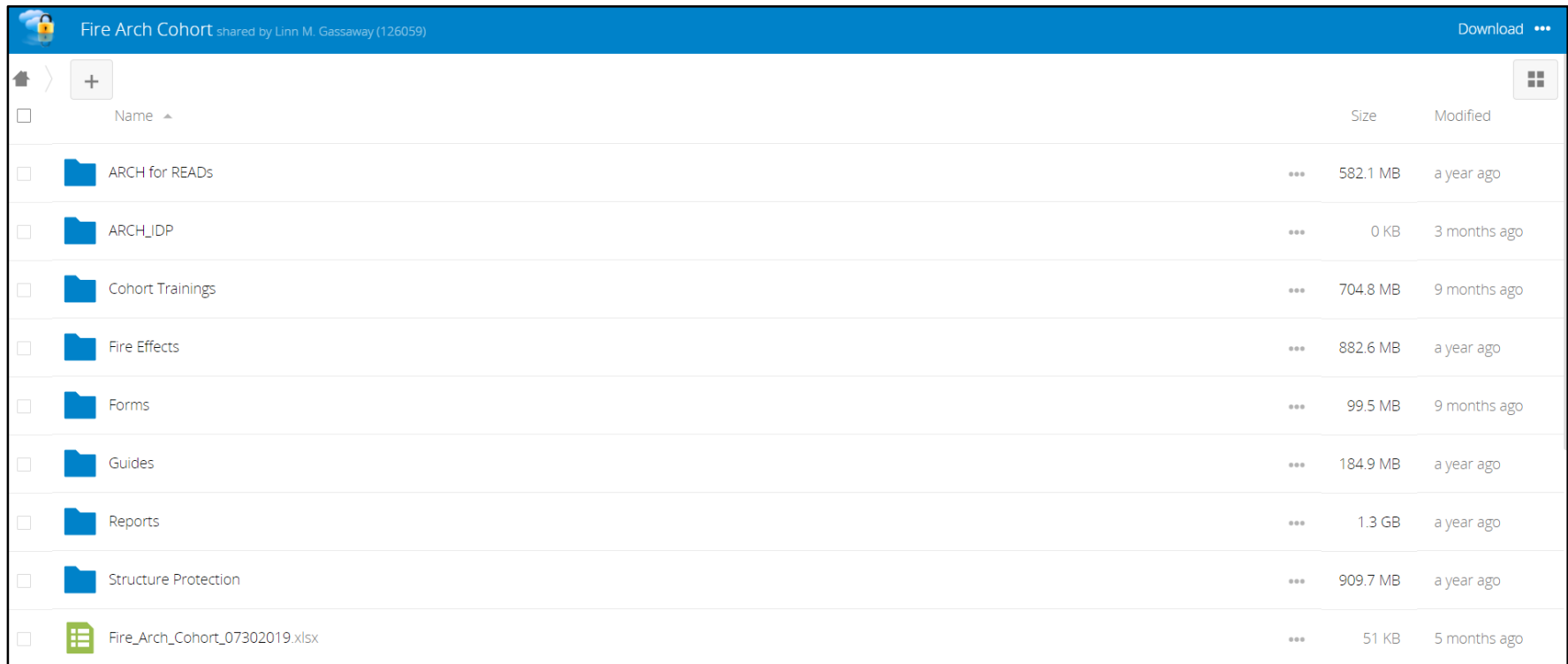
Materials can be downloaded

READ Cohort shared by Linn M. Gassaway (126059)				Download ...	
Name ▲				Size	Modified
<input type="checkbox"/>	1) Becoming a READ	...	155.5 MB	a year ago	
<input type="checkbox"/>	2) General READ Info and fire effects	...	29.1 MB	a year ago	
<input type="checkbox"/>	2a) Resources	...	1.4 GB	23 days ago	
<input type="checkbox"/>	3) Prefire Planning local unit	...	295.3 MB	9 months ago	
<input type="checkbox"/>	4) PreFire Planning - Individual	...	11.8 MB	9 months ago	
<input type="checkbox"/>	5) Dispatching	...	5.3 MB	a month ago	
<input type="checkbox"/>	6) During a Fire	...	96.8 MB	9 months ago	
<input type="checkbox"/>	7) Suppression Repair	...	263.1 MB	9 months ago	
<input type="checkbox"/>	8) READ Report	...	51.2 MB	a year ago	

# FIRE ARCH Cohort Cloud Vault

<https://new.cloudvault.usda.gov/index.php/s/AKBoGXnA35fMtr9>

Extensive database of ARCH resources available to anyone with link  
Materials can be downloaded



The screenshot displays the 'Fire Arch Cohort' shared folder in a cloud vault. The interface includes a blue header bar with the folder name and a 'Download' button. Below the header, there is a table listing the contents of the vault. Each row represents a file or folder, with columns for a checkbox, name, size, and modification date. The folders listed are 'ARCH for READs', 'ARCH\_IDP', 'Cohort Trainings', 'Fire Effects', 'Forms', 'Guides', 'Reports', and 'Structure Protection'. The file listed is 'Fire\_Arch\_Cohort\_07302019.xlsx'.

<input type="checkbox"/>	Name	Size	Modified
<input type="checkbox"/>	ARCH for READs	582.1 MB	a year ago
<input type="checkbox"/>	ARCH_IDP	0 KB	3 months ago
<input type="checkbox"/>	Cohort Trainings	704.8 MB	9 months ago
<input type="checkbox"/>	Fire Effects	882.6 MB	a year ago
<input type="checkbox"/>	Forms	99.5 MB	9 months ago
<input type="checkbox"/>	Guides	184.9 MB	a year ago
<input type="checkbox"/>	Reports	1.3 GB	a year ago
<input type="checkbox"/>	Structure Protection	909.7 MB	a year ago
<input type="checkbox"/>	Fire_Arch_Cohort_07302019.xlsx	51 KB	5 months ago



# Upcoming READ Courses



## Introductory READ Courses (N-9042)

- **NOCA READ Training:** April 7 - 9, 2020      Diablo, Washington
- **GRCA READ Training:** May 5 – 7, 2020      Flagstaff, Arizona
- **SAMO READ Training:** May 19 – 21, 2020      Thousand Oaks, California
- **YELL READ Training:** June 2 – 4, 2020      Yellowstone National Park

## Lead READ Course (non-NWCG course)

- **Lead READ Training:** May 12-14, 2020 in Susanville, California

## Fire Archeology Courses (non-NWCG course) w/ Linn Gassaway

- **Fire Archeology Course:** time and date tba in Susanville, California

**Let us know if you would like for us to host a READ training at your unit as well**

# Resource Advising is Meaningful Work











# Final Questions?





